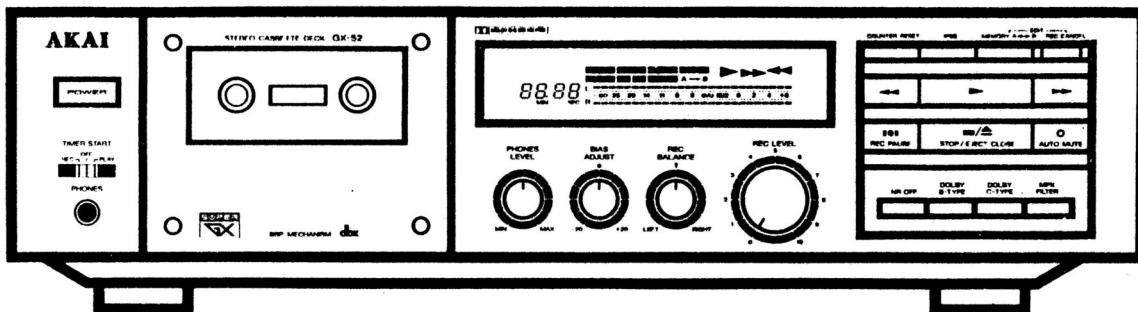


AKAI SERVICE MANUAL



STEREO CASSETTE DECK MODEL GX-52

SPECIFICATIONS

Track system	4 track 2 channel stereo	T.H.D.	Less than 0.8%
Heads	Twin field supper GX head for Recording and Playback x 1	Frequency response	
	Erase head x 1	Normal	25Hz to 17,000Hz ±3dB
Motors	Direct drive EG servo motor for Capstan drive x 1	CrO ₂	25Hz to 18,000Hz ±3dB
	DC motor for reel drive x 1	Metal	25Hz to 20,000Hz ±3dB
	DC motor for cam drive and Tape eject/loding x 1	Input sensitivity/Impedance	
Wow & flutter	0.027% WRMS (JIS), 0.045% (DIN)	LINE IN	70mV/47kohms
S/N (Metal)	59dB (Measured via tape with 3% THD recording level)	Output sensitivity/Impedance	388mV/2.7kohms
	Dolby B type NR swich ON: Improves up to 5dB at 1KHz, 10dB above 5KHz	Phones	1.3mW (8ohms)
	Dolby C type NR swich ON: Improves up to 15dB at 500Hz, 10dB at 1KHz to 10KHz	Power requirements	120V, 60Hz for Canada 220V, 50Hz for Europe except UK 240V, 50Hz for UK 110/120/220/240V, 50Hz/60Hz convertible for other countries
		Dimension	425(W) x 112(H) x 352(D)mm (16.7 x 4.4 x 13.9 inches)
		Weight	6.5Kg (14.3lbs)

*For improvement purpose, specifications and design are subject to change without notice.

*Noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.

"Dolby" and double-D symbol are trade marks of Dolby Laboratories Licensing Corporation.

★SAFETY INSTRUCTIONS

PRECAUTIONS DURING SERVICING

1. Parts identified by the  symbol parts are critical for safety. Replace only with parts number specified.
2. In addition to safety, others parts and assemblies are specified for conformance with such regulations as those applying to spurious radiation. These must also be replaced only with specified replacement.
3. Examples: RF cables, noise blocking capacitors, noise blocking filters, etc.
4. Use specified internal wiring. Note especially:
 - 1) Wires covered with PVC tubing
 - 2) Double insulated wires
 - 3) High voltage leads
5. Use specified insulating materials for hazardous live parts. Note especially:
 - 1) Insulation Tape
 - 2) PVC tubing
 - 3) Spacers (Insulating Barriers)
 - 4) Insulation Seats for transistors
 - 5) Plastic Screws for fixing microswitch (especially in turntable)
6. When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.), wrap ends of wires securely about the terminals before soldering.



7. Observe that wires do not contact heat producing parts (heatskins, oxide metal film resistors, fusible resistors, etc.).

★INFORMATION

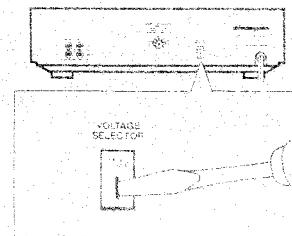
SYMBOLS FOR PRIMARY DESTINATION

Alphabet indicates the destination of the units as listed below.

Symbol	Principal Destinations
[A]	USA
[B]	UK
[C]	Canada
[E]	Europ (except UK)
[J]	Japan
[S]	Australia
[W]	W. Germany only
[U]	Universal Area
[X]	Custom version

VOLTAGE CONVERSION (Model only)

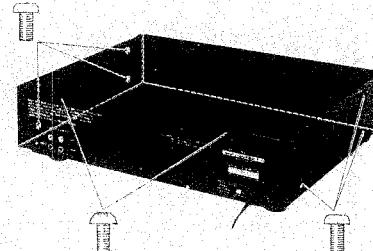
Before connecting the power cord, set the VOLTAGE SELECTOR located on the rear panel with a screwdriver so that the correct voltage is indicated.



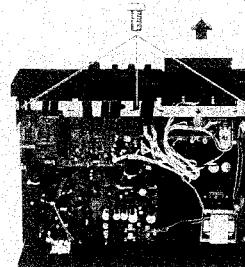
I.DISASSEMBLY

In case of trouble, etc. necessitating dismantling, please dismantle in the order shown in the photographs. Reassemble in reverse order.

1. REMOVAL OF UPPER COVER

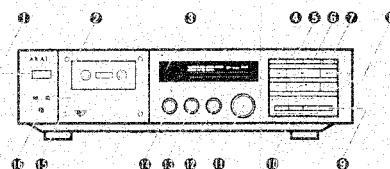


2. REMOVAL OF FRONT COVER



* Remove the cassette lid first then remove the front panel. (Turn on the Power and depress the eject button.)

II. CONTROLS



1 POWER Switch

To turn ON and OFF the power.

2 Cassette lid and cassette holder (Power assisted)

Load a cassette tape here. To open, press the  button. To close, press once again. Do not manually open this cassette holder, as it may damage your equipment.

3 FL (Fluorescent) Display

Tells you what the cassette deck is doing.

4 COUNTER RESET button

To reset the digital counter to "00.00".

5 IPSS button

To select playback with the IPSS system.

6 A ← B MEMORY button

For memorization of a selection(s) or part of a selection that you wish to hear repeatedly. Also used with the recording cancel system for erasure of unwanted parts.

7 REC CANCEL button

To cancel recording and rewind tape to the first detectable blank space of tape. Convenient for re-recording a section of tape.

8 Operating buttons

For playback and recording operations. Press the  button to open and close the cassette holder.

9 MPX (Multiplex) FILTER switch

To turn on and off the multiplex filter.

10 Noise reduction selector (NR OFF, DOLBY B and DOLBY C)

To select noise reduction for recording and playback purposes.

11 REC LEVEL control

To set recording levels. The level adjustment is the same amount for both right and left channels.

12 REC BALANCE control

To set the left and right channel balance of recording input levels.

13 BIAS ADJUST control

To set the recording bias current. The bias adjustment range is between -20% and +20% of the proper bias current of each tape position. If using a reference tape recommended for use with Akai cassette decks, set this control to the center click "0" position.

14 PHONES Level control

To adjust the output level of the PHONES jack.

15 TIMER START Switch

For absentee recording and timed playback.

16 PHONES jack

To listen through a pair of headphones, connect them to this jack.

III. PRINCIPAL PARTS LOCATION

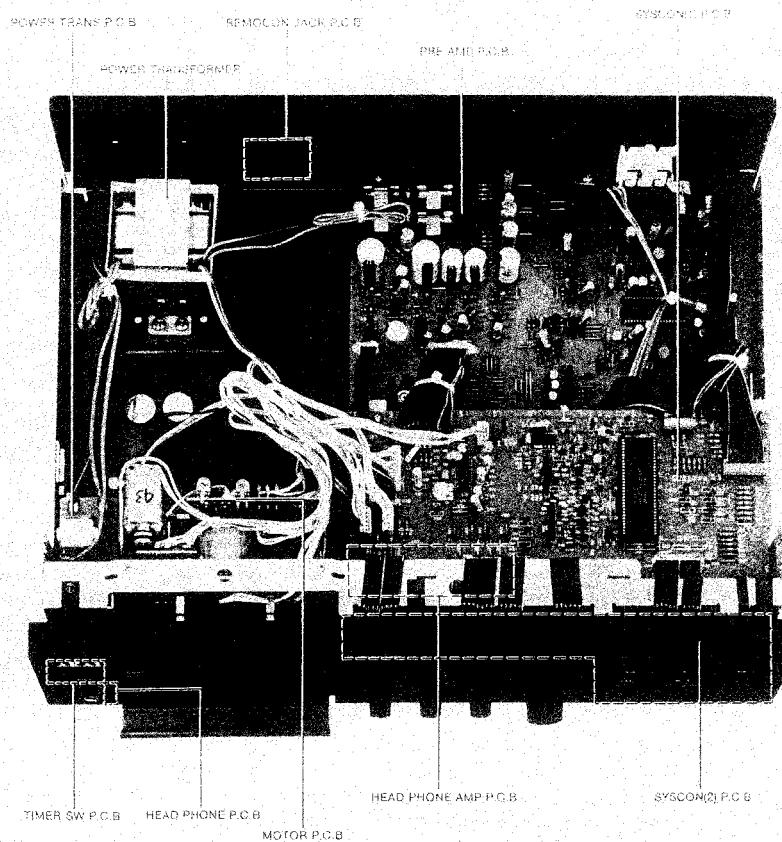


Fig 3-1 Top View

IV. MECHANICAL ADJUSTMENT

4-1. PINCH ROLLER PRESSURE MEASUREMENT (Refer to Fig.4-1)

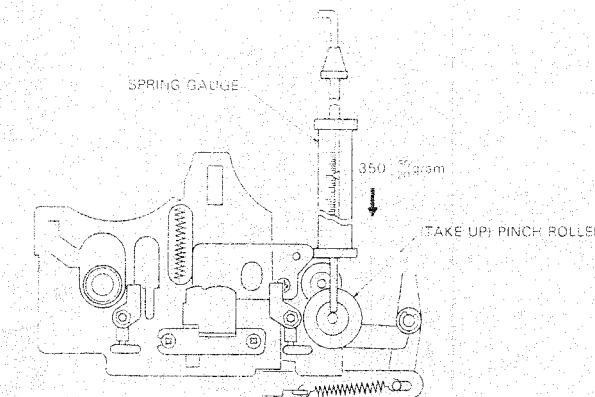


Fig.4-1.

Put in PLAY mode, push pinch roller arm down with the spring gauge push the pinch roller 1 or 2 mm from the capstan and release slowly. Read the spring gauge at the moment the pinch roller touches the capstan and begins to rotate.

Specified pressure: 350 ± 20 gram (Take up)

If there is no measurement obtained, replace the pinch roller spring.

4-2. WINDING TORQUE MEASUREMENT
IN EACH MODE (Refer to Fig.4-2)

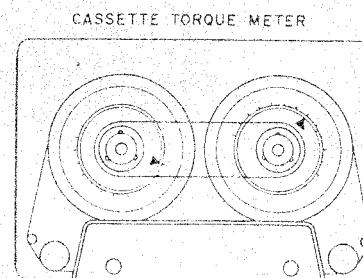


Fig.4-2.

Insert a cassette torque meter (AJ-751197) and measure in each mode. For First Forward and Rewind, measure at the end of the tape has stopped running.

PLAY mode
Take up Torque : 40 ± 10 g-cm

Back Tension Torque : 10 ± 10 g-cm

FIRST FORWARD, REWIND mode

Take up Torque : 120 ± 50 g-cm

4-3 HOW TO INSTALL VOLUME (VR901) AND CAM WHEEL

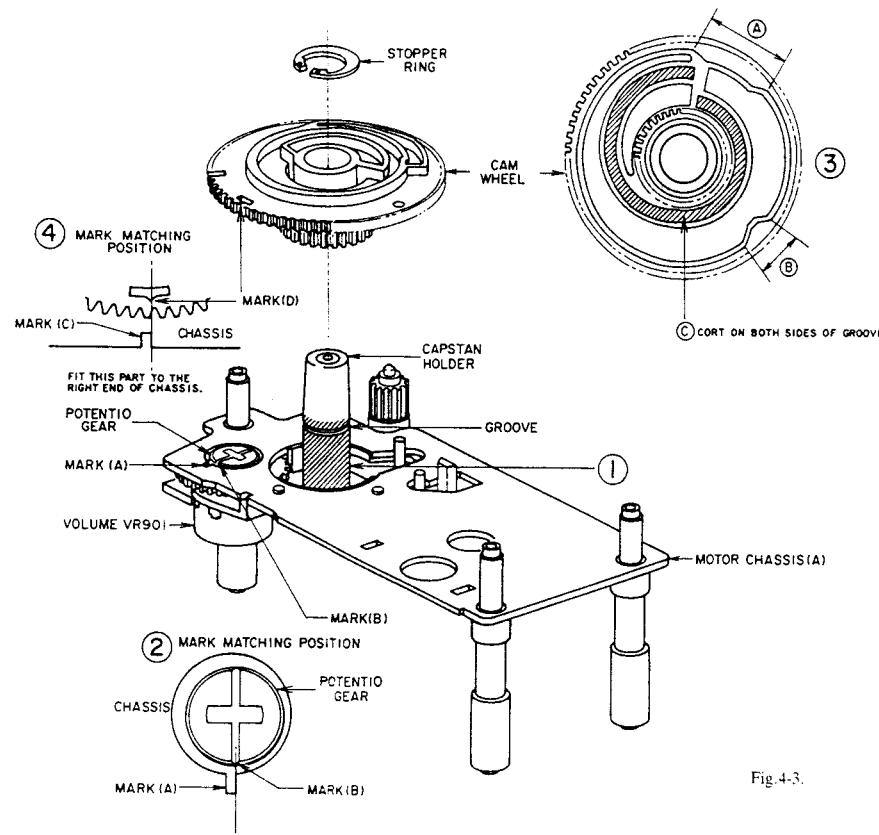


Fig.4-3.

- 1) Apply Molybdenum coat on the capstan holder
Apply Molybdenum coat on the area of 360° from the bottom to the upside 2mm of groove as shown in the figure. (Fig.4-3-①)
- 2) Fitting position volume (potentio gear)
Fit the right end of Mark (A) to the center of Mark (B) as shown in the figure. (Fig. 4-3-2)
- 3) Apply Molybdenum coat on the ③, ④ and ⑤ shown in the Fig.4-3-③
- 4) Set the cam wheel on the capstan wheel (ensure that the cam wheel and potentio gear are meshed properly).

When the cam wheel is set properly, fit the center of Mark (D) to the right end of Mark (C). (Fig.4-3-④)

- 5) Fit the stopper ring in the groove of the capstan holder.

CAUTIONS:

1. Make sure that the teeth on the periphery of cam wheel and the cam are absolutely free from any scratch, cut, etc.
2. Make sure that Molybdenum coat is applied on the specified area only.

V. HEAD ADJUSTMENT

4-4. POTENTIOMETER PRESET VOLTAGE ADJUSTMENT (Refer to fig.4-4 to 4-5)

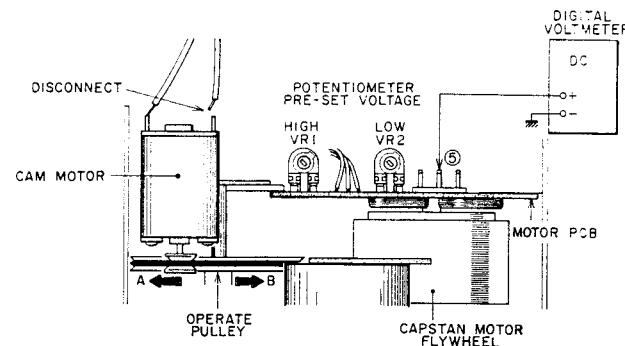


Fig.4-4.

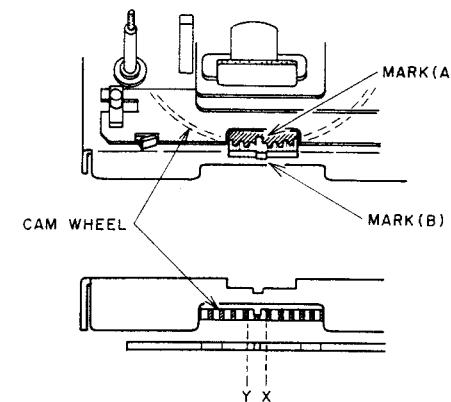


Fig.4-5.

- 1) **LOW VOLTAGE ADJUSTMENT**
 - With power OFF, remove the connecting cord of the cam motor and turn the operate pulley fully with your fingers in A direction. (EJECT DIRECTION)
 - Connect the digital voltmeter as shown in fig.4-4.
 - With power ON, adjust VR2 so that the voltage reading will be 1.15V (DC).
- 2) **HIGH VOLTAGE ADJUSTMENT**
 - With power OFF, turn the operate pulley fully with your fingers in B direction. (PLAY DIRECTION)
 - With power ON, adjust VR1 so that voltage reading will be 9.08V (DC).
 - Repeat Items 1) and 2).
 - a. With power OFF, connect the connecting cord of the motor.
 - b. Remove the digital voltmeter.

- Remove the Cassette lid, Front panel and Bottom cover.
- a. Set power to ON.
- b. Adjust VR1 slightly so that the center of Marker (A) coincides with the center of Marker (B) (should be within the range between X and Y) at STOP Mode as shown in Fig. 4-5. (The marker (STOP) on the CAM WHEEL can be seen clearly by lighting it from the back.)
- c. Set the IPLS switch to ON.
- d. Confirm that head and pinch rollers do not move up and down when the FF and REW switches are alternately depressed.
- e. Turn the reel with fingers in STOP Mode to check that the brake works sufficiently.
- When the brake acts normally, the take-up reel does not turn clockwise while the supply reel does not rotate counterclockwise.

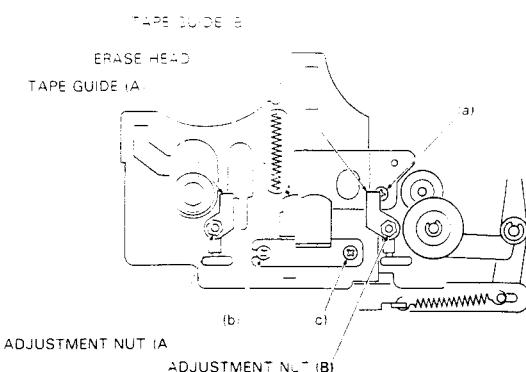


Fig.5-1.

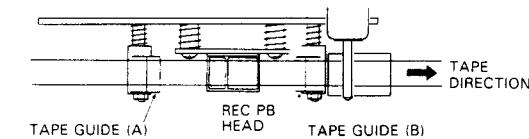


Fig.5-2.

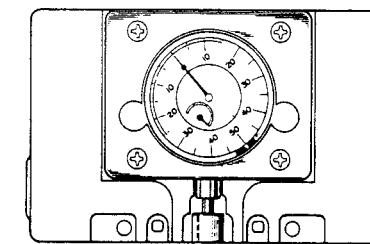


Fig. 5-3 Cassette Head Projection Gauge (AJ-751180)

5-1. REC/PB HEAD PROJECTION ADJUSTMENT

Take off the LID CASE and set the cassette head projection gauge (AJ-751180) and set to PLAY mode. Loosen the screw (a) and adjust so that the gauge indication at that time will be 3.2 ± 0.1 mm. After adjustment, apply paintlock on the screw (a).

5-2. TAPE GUIDE HEIGHT ADJUSTMENT

- Set the mirror cassette tape (AJ-751178) and set to PLAY mode.
- Adjust the tape guide (A) so that the parts of the erase head coming out of both sides of the tape (A and A') in Fig. 5-2 will be equal. For the adjustment, use the adjustment nut (A).
- Adjust the tape guide (B) so that the tape runs smoothly and is not hitched by the tape guide. For the adjustment, use the adjustment nut (B).
- After adjustment, paint-lock the adjustment nuts (A) and (B).

5-3. REC/PB HEAD HEIGHT ADJUSTMENT

- Set the mirror cassette tape and set to PLAY mode.
- Adjust the screws (b), (c) and (d) so that the upper edge of REC/PB head Lch core and the upper side of the tape is in alignment.
- Playback the head height adjustment tape (4 Track 1,000Hz) (AT-750775), and fine-adjust the screw (b), (c) and (d) so that the largest output is obtained for both channels.

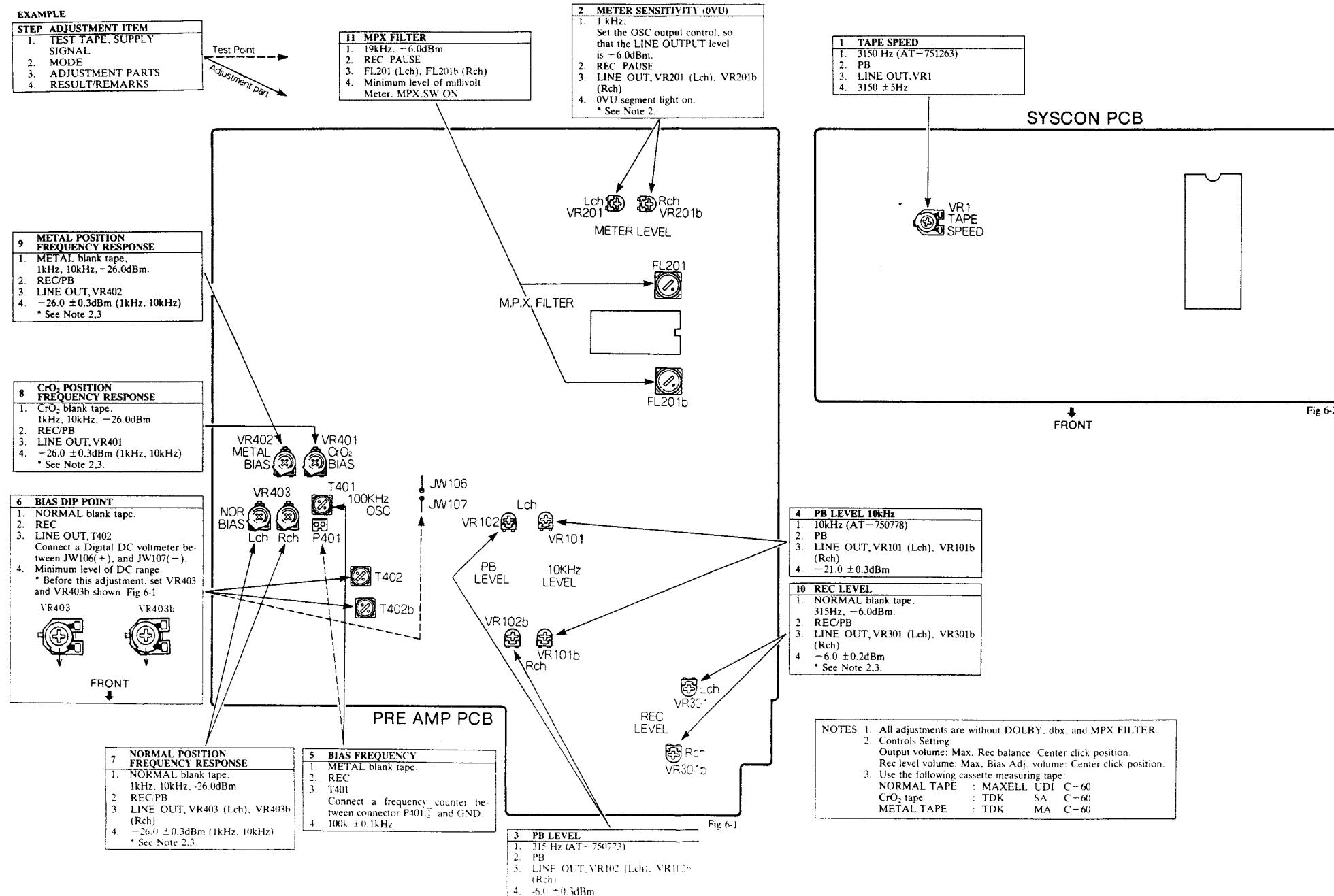
5-4. REC/PB HEAD AZIMUTH ALIGNMENT ADJUSTMENT

- Playback a 10kHz Head Azimuth Alignment Tape (AT-750778) and adjust the screw (d) until the output levels of both channels are at maximum.
- Record a 10kHz, -26dBm signal from the audio frequency oscillator.
- Rewind and check for any fluctuation in the output level at playback.
- After adjustment, paintlock the screws (b), (c) and (d).

NOTES:

1. Be sure to clean the heads prior to head adjustment.
2. Be careful not to use a magnetized driver or other magnetized tools in the vicinity of the heads.
3. Be sure to demagnetize the heads with a Head Demagnetizer before and after head adjustment.

VI. PRE AMP, SYSCON and dbx PCB ADJUSTMENT



VII. PARTS LIST

ATTENTION

- When placing an order for parts, be sure to list Part No., Model No. and the description of each part. Otherwise, the non-delivery of the part or the delivery of a wrong part may result.
- Please make sure that Part No. is correct when ordering. If not, a part different from the one you ordered may be delivered.
- Since the parts shown in Parts List of Preliminary Service Manual may have been the subject of changes, please use this Parts List for all future reference.

HOW TO USE THIS PARTS LIST

- This Parts List lists those parts which are considered necessary for repairs. Other common parts, such as resistors and capacitors, are listed in the "Common List for Service Parts" from which these parts should be selected and stocked.
- The Recommended Spare Parts List shows those parts in the Parts List which are considered particularly important for service.
- Parts not shown in the Parts List and "Common List for Service Parts" will not in principle be supplied.
- How to read the Parts List.

a) Mechanism Block

2. HEAD BASE BLOCK

REF. NO.	PART NO.	DESCRIPTION
2-1x	BH-T2023A320A	HEAD BASE BLOCK
2-2	HP-H2206A010A	HEAD R/P PR4-8FUC
2-3	ZS-477876	PAN20x03STL CMT
2-4	ZS-536488	BID20x08STL CMT
2-5	ZG-402895	SP CS ANGLE ADJUST

SP (Service Parts) Classification

A small "x" indicates that this part is not shown in the Photo or Illustration.

This number corresponds with the individual parts index number in that figure.

This number corresponds with the Figure Number.

6. MAIN PC BOARD

REF. NO.	PART NO.	DESCRIPTION
6-IC1	EL-324536	IC HD14049BP
6-IC2	EL-336801	IC MB8841-564M
6-C1A	EC-338399	C MMV V 223M 250AC [U,E,B,S]
6-C1B	EC-350949	C MMV V 223M 250DC [J]
6-C1C	EC-338397	C MMV V 223M 125AC [C,A]
6-X1	EL-318384	OSC X'TAL NC-18C

Symbols for primary destination

[A]: AAL(U.S.A.) [S]: SAA(Australia)

[B]: BEAB(England) [U]: UT(Universal Area)

[C]: CSA(Canada) [V]: VDE(W. Germany)

[E]: CEE(Europe) [Y]: Custom Version

[J]: JPN(Japan)

SP (Service Parts) Classification

These reference symbols correspond with component symbols in the Schematic Diagrams.

The available PC Board Blocks are listed separately.

- When Part No. is known, Parts Index at end of Parts List can be used to locate where that part is shown in Parts List by its Reference No. listed at right of Part No.

WARNING

⚠ (*) INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURE'S RECOMMENDED PARTS.

AVERTISSEMENT

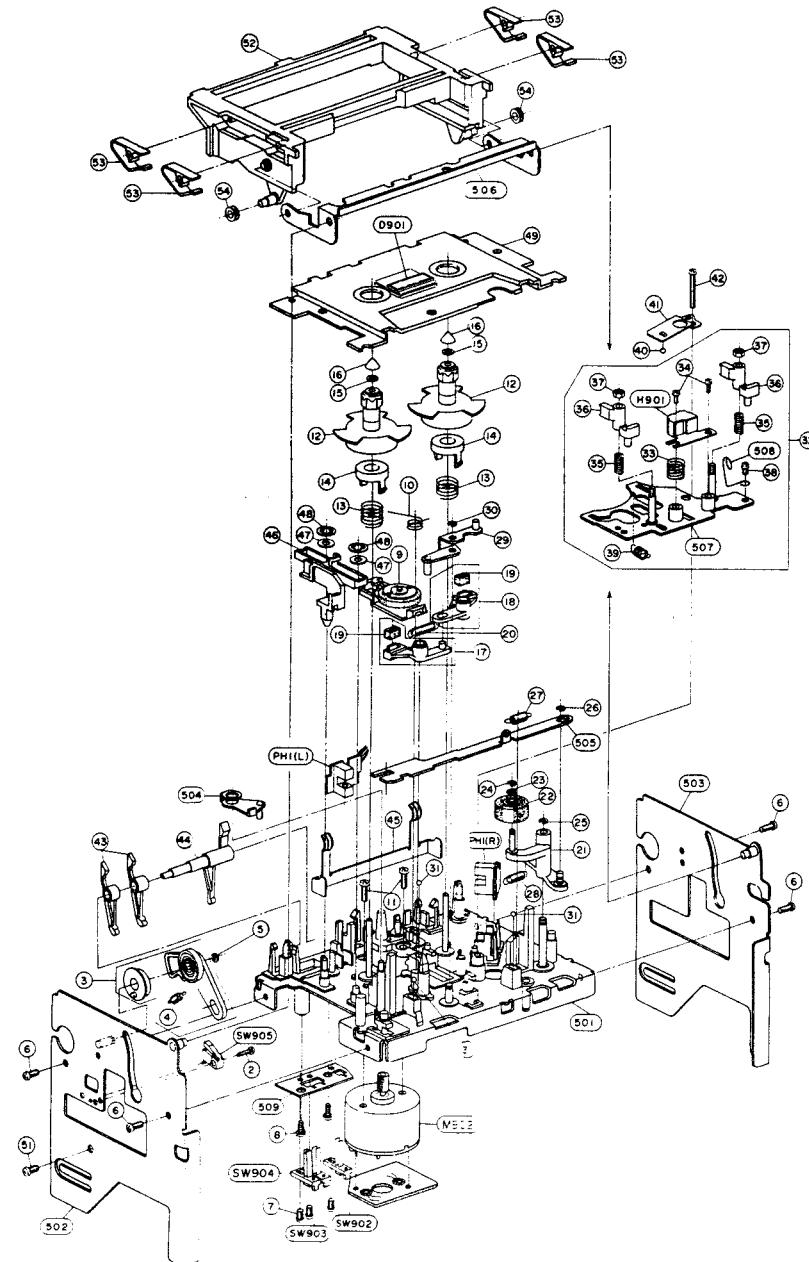
⚠ (*) IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DÉGRÉ DE SÉCURITÉ DE L'APPAREIL, NE remplacer QUE DES PIÈCES RECOMMANDÉES PAR LÉ FABRICANT.

1. RECOMMENDED SPARE PARTS

Because, if the parts listed below are on hand, almost any repair can be accomplished, we suggest that you stock these Recommended Spare Parts items.

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	BR-T2100A020A	MECHA BLK GX-52	56	ES-372912	SW LEAF SPP821 01-2
2	BR-T2100A030A	HEAD BLK GX-52	57	ES-373380	LOADING SW
3	BM-M3103A010A	MOTOR BLM-330	58	*ES-371104	SW PUSH ESE-58630 4 THROW N
4	BM-8345196	CAPSTAN MOTOR	59	*ES-359606	NR SW
		MOTOR OPERATION PULLEY/PIR	60	ES-370965	SW PUSH SDDLD1082A 01-1
5	BR-T2069A360A	REEL TABLE BLK GX-9	61	ES-373381	POWER SW
6	*BT-373395	TRANS POWER T2100-A.C.	62	ET-345091	SW SELECTOR 8T-41S0454 01-4
		[A.C.]			U[VOLTRAGE SELECTOR]
7	*BT-373398	TRANS POWER T2100B.SI			SW SLIDE SSSU02 1-01-03N
		[B.S.]			[TIMER START SW]
8	*BT-373396	TRANS POWER T2100E.VI			SW TACT SKHMPP
		[E.V.]			DETECTOR SPI-201-40 B.C
9	*BT-373394	TRANS POWER T2100-U			[DETECTOR-R PCB]
		[U]			TR DTA143ZS
10	ED-307572	D SILICON H 1SS131	63	ET-373382	TR DTA144EF
11	ED-624903	D SILICON H 1S2473	64	ET-372030	TR DTA144ES
12	*ED-330622	D SILICON 1SR35-100V 100 1CA	65	ET-354415	TR DTA144ES
13	ED-316389	D ZENER H Z11 A2	66	ET-353897	TR DTC114ES
14	ED-324014	D ZENER H Z11 B1	67	ET-354365	TR DTC114YS
15	ED-346550	D ZENER H Z11L B2	68	ET-373485	TR DTC123JS
16	ED-338561	D ZENER H HZ2FA B2 F10	69	ET-373392	TR DTC124XS
17	ED-324013	D ZENER H HZ2O 2	70	ET-373391	TR DTC143ZS
18	ED-346824	D ZENER H HZ30 2	71	ET-360824	TR DTC144EF
19	ED-306010	D ZENER H HZ6 A2	72	ET-354414	TR DTC144ES
20	ED-309069	D ZENER H HZ6 B2	73	ET-370310	TR DTC144TS
21	ED-346804	D ZENER H HZ7 B2	74	ET-308472	TR 2SA1115 E.F.G F05
22	ED-346609	D ZENER H HZ9 C1	75	*ET-354841	TR 2SA1282A E.F.G F05
23	ED-346538	D ZENER H HZ9L A2	76	*ET-352726	TR 2SA1392 T.U
24	ED-346540	D ZENER H HZ9L B1	77	ET-337760	TR 2SA984K F
25	*EF-355374	FUSE BET T 250V 500MA	78	ET-308977	TR 2SC2274K F F05
		[B]	79	ET-308141	TR 2SC2603 G F05
26	*EF-358974	FUSE BET T 250V 630MA	80	*ET-365394	TR 2SC3242A E.F.G F05
		[B]	81	*ET-357845	TR 2SC3242A F.G F05
27	*EF-593706	FUSE SEMKO T 250V 500MA	82	ET-349081	TR 2SC3383 S.T
		[E]	83	ET-347961	TR 2SD1012-V G F05
28	*EF-601942	FUSE SEMKO T 250V 630MA	84	*ET-354083	TR 2SD1189 Q.R
		[E]	85	EV-373389	VR ROTARY RK1631110 B102
29	*EF-306949	FUSE TSC A 250V 1.25A	86	EV-373387	[BIAS ADJUST]
		[U]			VR ROTARY RK16312A0 A104X2
30	*EF-309388	FUSE TSC A 250V 800MA	87	EV-373388	[REC LEVEL]
		[U]			VR ROTARY RK16312A0 A104X2
31	*EF-309392	FUSE TSC 125V 1.25A	88	EV-373385	[PHONES LEVEL]
		[C]			VR ROTARY RK1631210 M104 N104
32	*EF-309391	FUSE TSC 125V 800MA	89	HR-H2505A010A	[REC BALANCE]
		[C]	90	MP-346329	HEAD COMB EPR4-13TG
33	EH-372101	FILTER DB 42B-516-04	91	TC-336605	PINCH ROLLER(C)
34	EL-337568	HOLE E OHD-HO70			WIND IDLER ASSY
35	EL-359985	IC CX20187			
36	EL-356327	IC HA12067NT			
37	EL-337013	IC LB1290			
38	EL-345765	IC LB1292			
39	EL-355602	IC LB1649			
40	EL-373379	IC M50743-600SP T2100 CUSTOM			
41	EL-357498	IC M51143AL			
42	EL-353227	IC M5215L			
43	EL-346071	IC M5218L 21			
44	EL-348785	IC M5220L			
45	EL-201940	IC NUM4558S			
46	EL-336932	IC UPC1043C			
47	EL-373383	IC UPC1297CA			
48	EL-372031	OSC CE W. C FCR8 CM8 8.0MHZ			
49	EM-373136	IND FL FP26A.W15Y			
50	EQ-328529	RELAY LEAD L4B2NS 2NO 12V			
51	*ER-367642	R FUSE H S10 ERD2FC 1 4W 1200G			
52	*ER-200925	R FUSE H S10 ERD2FC 1 4W 2700G			
53	*ER-200972	R FUSE H S10 ERD2FC 1 4W 3300G			
54	ER-358910	R OMF H S15 FS 2W '81J			
55	ES-336990	SW LEAF BSW-169 21-1 NO			
		[CRO2 METAL]			

MECHA BLOCK

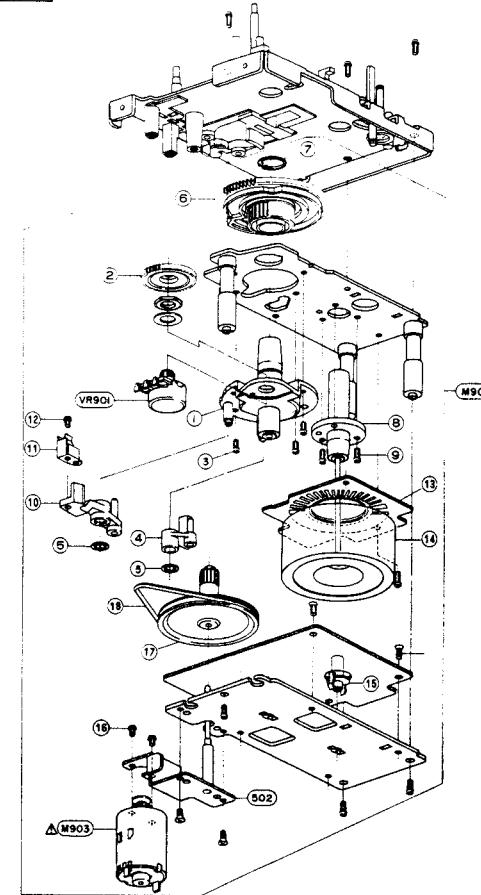


2. MECHA BLOCK

Ref. No.	Part No.	Description
1	BB-T2100A020A	MECHA BLK GX-52
2	ZS-608106	PAN20X06STL CMT
3	BZ-T2030A110C	OK CLUTCH BLK GX-6
4	ZG-341970	SP PULL OIL CLUTCH
5	ZW-270088	RING E190SUP CMT
6	ZS-201275	ST PAN26X06STL CMT
SW905	ES-372912	SW LEAF SPBP21 01-2 [LOADING SW]
PH1(R)	ET-345091	DETECTOR SPI-201-40-B.C [DETECTOR-R PCB]
PH1(L)	ET-345091	DETECTOR SPI-201-40-B.C [DETECTOR-L PCB]
SW902	ES-336990	SW LEAF BSW-169 01-1 NO [CRO2/ METAL]
SW903	ES-336990	SW LEAF BSW-169 01-1 NO [120U / 70U]
SW904	ES-336990	SW LEAF BSW-169 01-1 NO [ANTI REC]
7	ZS-464703	BID20X04STL CMT
8	ZS-336614	PT PAN26X08STL CMT
9	TC-336605	WIND IDLER ASSY
10	ZG-336140	SP TORSION IDLER
M902	BM-B336989	MOTOR REEL (PULLEY) PART [REEL MOTOR]
11	ZS-550708	PAN26X08STL N3
12	BR-T2069A360A	REEL TABLE BLK GX-9
13	ZG-336141	SP PUSH BT
14	TC-336142	HOLDER BT SP
15	ZW-330073	PW21X040X020 TOUGH LIGHT NO44
16	MT-305793	REEL CAP
17	BL-T2030A160A	LEVER BRAKE (A) BLK GX-F51
18	BL-T2030A170A	LEVER BRAKE (B) BLK GX-F51
19	TC-336146	BRAKE RUBBER
20	ZG-312946	SP T1-03/2 .0/29-16.0 T1-062
21	BL-8336150	ARM PINCH ROLLER (A) PART
22	MP-346329	PINCH ROLLERIC
23	ZW-305546	PW21X040X025PSP
24	ZW-358667	RING E190SUP CMT
25	ZW-270088	RING E190SUP CMT
26	ZW-270088	RING E190SUP CMT
27	ZG-342575	SP PULL PINCH ROLLER (T-2)
28	ZG-321534	SP T2-03/2 .0/29-15.2 T2-060
29	BL-8336155	ARM HEAD SLIDE PART
30	ZW-270088	RING E190SUP CMT
31	MV-357208	BALL 200STL
32	BI-T2100A030A	HEAD BLK GX-52
33	ZG-373323	SP PUSH HEAD
H901	HR-H2505A010A	HEAD COMB EPR4-13TG
34	ZS-201508	PAN20X04STL N3
35	ZG-3361308	SP PUSH GUIDE B
36	HZ-336129	GUIDE TAPE
37	ZW-373137	N20STL BNI 1
38	ZS-391386	PAN23X03STL N3
39	ZG-341972	SP PULL HEAD RETURN
40	MV-357208	BALL 200STL
41	ZG-336157	SP PLATE HEAD HOLD
42	ZS-308931	PAN26X18STL CMT
43	ML-336158	LEVER DETECTION (B)
44	ML-336159-A	LEVER DETECTOR(A)
45	ZG-336180	SP PLATE CASSETTE HOLDER (A)
46	TC-336161	SLIDE EJECT
47	ZW-306464	PW31X070X050STL CMT
48	ZW-329422	RING CS 030
49	SP-336152-B	LID DECORATION (B)
D901	ED-344244	D LED SFL-601C AMBER [HOUSING LAMP PCB]
50	ZS-479474	PAN26X05STL CMT
51	ZS-201275	ST PAN26X06STL CMT
52	SP-336163B	LID CASE(2)
53	ZG-336615	SP PLATE CASSETTE HOLDER (B)
54	SZ-336166	COLLAR LID.

NOTE: The parts reference numbered here except the ones in 500's are normally stocked for replacement purpose. The rest of the parts shown in this manual are not stocked since they are seldom required for routine service.

MOTOR BLM310B BLOCK



3. MOTOR BLM-300 BLOCK

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
M901	BM-M3103A010A	MOTOR BLM-300 [CAPSTAN MOTOR]	14	BF-8338013	FLYWHEEL PART
1	TC-3360048	HOLDER CAPSTAN (C-2)	15	TC-3360116	HOLDER THRUST (A)
VR901	EV-337052	VR ROTARY 16110XOR B103	M903	BM-8345196	MOTOR OPERATION (PULLEY) PART [CAM MOTOR]
2	MZ-336005	GEAR POTENTION	16	ZS-592378	PAN26X03STL CMT
3	ZS-432843	PAN26X04STL CMT	17	MR-3360119	PULLEY OPERATE
4	BL-B336007	LEVER BRAKE CAM PART	18	MB-336021	BELT OPERATION
5	ZW-653163	RING CS 280STL PKR			
6	MZ-336006	CAM WHEEL			
7	ZW-336004	RETAINING RING O S930SLP ACP			
8	TC-336002	HOLDER CAPSTAN (B)			
9	ZS-479474	PAN26X05STL CMT			
10	BL-B336009	LEVER EJECT CAM PART			
11	MZ-353158	SP PLATE EJECT			
12	ZS-477876	PAN20X03STL CMT			
13	EA-336012	PC FG			

NOTE: The parts reference numbered here except the ones in 500's are normally stocked for replacement purpose. The rest of the parts shown in this manual are not stocked since they are seldom required for routine service.

4. P.C BOARD BLOCK

Ref. No.	Part No.	Description
1A	BA-T2100A040A	PC#) PRE AMP BLK GX-52(U)
1B	BA-T2100A040B	PC#) PRE AMP BLK GX-52(C.E.B)
2	BA-T2100A050A	PC#) SYSCON BLK GX-52

PC PRE-AMP BLK CONSISTS OF FOLLOWING P.C.BORD.

- PRE-AMP P.C.BORD
- HEADPHONE AMP P.C.BORD
- POWER TRANS P.C.BORD
- HEADPHONE P.C.BORD

PC SYSCON BLK CONSISTS OF FOLLOWING P.C.BORD.

- SYSTEM CONTROL(1)P.C.BORD
- SYSTEM CONTROL(2)P.C.BORD
- TIMER SW P.C.BORD
- REMOCON JACK P.C.BORD

5. PRE-AMP P.C BOARD

Ref. No.	Part No.	Description
D101	ED-624903	D SILICON H 1S2473
D501	*ED-330622	D SILICON 1SR35-100VL 100/1.0A
D502	*ED-330622	D SILICON 1SR35-100VL 100/1.0A
D503	*ED-330622	D SILICON 1SR35-100VL 100/1.0A
D504	*ED-330622	D SILICON 1SR35-100VL 100/1.0A
D505	ED-624903	D SILICON H 1S2473
D506	ED-373390	D LED LTZ-R15 RED F10
D507	ED-346540	D ZENER H H29L B1
D508	ED-624903	D SILICON H 1S2473
D509	ED-373390	D LED LTZ-R15 RED F10
D510	ED-346540	D ZENER H H29L B1
D511	*ED-330622	D SILICON 1SR35-100VL 100/1.0A
D512	*ED-330622	D SILICON 1SR35-100VL 100/1.0A
D513	*ED-330622	D SILICON 1SR35-100VL 100/1.0A
D514	*ED-330622	D SILICON 1SR35-100VL 100/1.0A
D515	ED-624903	D SILICON H 1S2473
D516	ED-346550	D ZENER H H211L B2
D517	ED-624903	D SILICON H 1S2473
D518	ED-346550	D ZENER H H211L B2
D519	ED-346538	D ZENER H H29L A2
D520	ED-346538	D ZENER H H29L A2
D521	*ED-330622	D SILICON 1SR35-100VL 100/1.0A
D522	*ED-330622	D SILICON 1SR35-100VL 100/1.0A
D523	ED-324014	D ZENER H H211 B1
D541	*ED-330622	D SILICON 1SR35-100VL 100/1.0A
D542	*ED-330622	D SILICON 1SR35-100VL 100/1.0A
D543	*ED-330622	D SILICON 1SR35-100VL 100/1.0A
D544	*ED-330622	D SILICON 1SR35-100VL 100/1.0A
D552	ED-324014	D ZENER H H211 B1
D553	ED-324014	D ZENER H H211 B1
D554	*ED-330622	D SILICON 1SR35-100VL 100/1.0A
D555	*ED-330622	D SILICON 1SR35-100VL 100/1.0A
D556	*ED-330622	D SILICON 1SR35-100VL 100/1.0A
D557	ED-306010	D ZENER H H26 A2
D558	ED-309069	D ZENER H H26 B2
D559	ED-624903	D SILICON H 1S2473
D560	ED-346524	D ZENER H H20 3
D561	ED-324013	D ZENER H H20 2
D562	*ED-330622	D SILICON 1SR35-100VL 100/1.0A
D563	*ED-330622	D SILICON 1SR35-100VL 100/1.0A
D564	*ED-330622	D SILICON 1SR35-100VL 100/1.0A
D565	*ED-330622	D SILICON 1SR35-100VL 100/1.0A
D566	*ED-330622	D SILICON 1SR35-100VL 100/1.0A
D601	ED-624903	D SILICON H 1S2473
D602	ED-624903	D SILICON H 1S2473
FL101	EH-368105	FILTER EMI STY103NB
FL201	EH-372101	FILTER DB 42B 5162-04
FL202	ED-323982	COIL TUN 1002-431 100.000KHZ
FL203	EH-368105	FILTER EMI STY103NB
FL204	EH-368105	FILTER EMI STY103NB
FL205	EH-368105	FILTER EMI STY103NB
FR401	*ER-200972	R FUSE H S10 ERD2FC 1 4W 33R0G

PARTS LIST

FR501 *ER-200926 R FUSE H S10 ERD2FC 1/4W 27R0G

FR502 *ER-367642 R FUSE H S10 ERD2FC 1/4W 1200G

IC101 EI-348785 IC M5220L

IC201 EI-359985 IC CX20187

IC301 EI-346071 IC M5218L-21

IC401 EI-373383 IC UPC1297CA

IC501 EI-357498 IC M51143AL

J601 EJ-336905 PIN J AUC-035-ACB P 4P [LINE IN/OUT]

L201 EO-372996 COIL FIX 1 RC875 223J

L301 EO-357050 COIL FIX 1 RC875 822J

L302 EO-369999 COIL FIX 17-95249-13 542J

RL101 EO-328529 RELAY LEAD LAB2NS 2NO 12V

TR101 ET-349081 TR 2SC3383 S.T

TR102 ET-349081 TR 2SC3383 S.T

TR103 ET-349081 TR 2SC3383 S.T

TR104 ET-373485 TR DTC123S

TR105 ET-354365 TR DTC114YS

TR106 ET-354365 TR DTC114YS

TR201 ET-349081 TR 2SC3383 S.T

TR202 ET-349081 TR 2SC3383 S.T

TR203 ET-349081 TR 2SC3383 S.T

TR301 ET-349081 TR 2SC3383 S.T

TR302 ET-349081 TR 2SC3383 S.T

TR303 ET-349081 TR 2SC3383 S.T

TR304 ET-349081 TR 2SC3383 S.T

TR305 ET-349081 TR 2SC3383 S.T

TR306 ET-349081 TR 2SC3383 S.T

TR307 ET-349081 TR 2SC3383 S.T

TR401 *ET-357845 TR 2SC242A F.G F05

TR402 ET-373391 TR DTC143S

TR403 ET-370310 TR DTC144TS

TR404 ET-370310 TR DTC144TS

TR405 ET-308977 TR 2SC2274K F F05

TR406 ET-308977 TR 2SC2274K F F05

TR407 ET-308472 TR 2SA1115 E.F.G F05

TR408 ET-373392 TR DTC124XS

TR409 ET-370310 TR DTC144TS

TR410 ET-370310 TR DTC144TS

TR411 ET-354415 TR DTA144ES

TR513 ET-308141 TR 2SC2803 G F05

TR501 *ET-349081 TR 2SC3383 S.T

TR502 ET-352726 TR 2SA1392 T.U

TR503 *ET-352726 TR 2SA1392 T.U

TR504 ET-349081 TR 2SC3383 S.T

TR505 *ET-349081 TR 2SC3383 S.T

TR506 *ET-349081 TR 2SC3383 S.T

TR507 *ET-349081 TR 2SC3383 S.T

TR508 *ET-352726 TR 2SA1392 T.U

TR509 *ET-352726 TR 2SA1392 T.U

TR510 *ET-352726 TR 2SA1392 T.U

TR511 *ET-357845 TR 2SC242A F.G F05

TR512 *ET-357845 TR 2SC242A F.G F05

TR513 *ET-357845 TR 2SC242A F.G F05

TR514 *ET-357845 TR 2SC242A F.G F05

TR515 *ET-357845 TR 2SC242A F.G F05

TR516 *ET-357845 TR 2SC242A F.G F05

TR517 *ET-357845 TR 2SC242A F.G F05

TR518 *ET-357845 TR 2SC242A F.G F05

TR519 *ET-357845 TR 2SC242A F.G F05

TR520 *ET-357845 TR 2SC242A F.G F05

TR521 *ET-357845 TR 2SC242A F.G F05

TR522 *ET-357845 TR 2SC242A F.G F05

TR523 *ET-357845 TR 2SC242A F.G F05

TR524 *ET-357845 TR 2SC242A F.G F05

TR525 *ET-357845 TR 2SC242A F.G F05

TR526 *ET-357845 TR 2SC242A F.G F05

TR527 *ET-357845 TR 2SC242A F.G F05

TR528 *ET-357845 TR 2SC242A F.G F05

TR529 *ET-357845 TR 2SC242A F.G F05

TR530 *ET-357845 TR 2SC242A F.G F05

TR531 *ET-357845 TR 2SC242A F.G F05

TR532 *ET-357845 TR 2SC242A F.G F05

TR533 *ET-357845 TR 2SC242A F.G F05

TR534 *ET-357845 TR 2SC242A F.G F05

TR535 *ET-357845 TR 2SC242A F.G F05

TR536 *ET-357845 TR 2SC242A F.G F05

TR537 *ET-357845 TR 2SC242A F.G F05

TR538 *ET-357845 TR 2SC242A F.G F05

TR539 *ET-357845 TR 2SC242A F.G F05

TR540 *ET-357845 TR 2SC242A F.G F05

TR541 *ET-357845 TR 2SC242A F.G F05

TR542 *ET-357845 TR 2SC242A F.G F05

TR543 *ET-357845 TR 2SC242A F.G F05

TR544 *ET-357845 TR 2SC242A F.G F05

TR545 *ET-357845 TR 2SC242A F.G F05

TR546 *ET-357845 TR 2SC242A F.G F05

TR547 *ET-357845 TR 2SC242A F.G F05

TR548 *ET-357845 TR 2SC242A F.G F05

TR549 *ET-357845 TR 2SC242A F.G F05

TR550 *ET-357845 TR 2SC242A F.G F05

TR551 *ET-357845 TR 2SC242A F.G F05

TR552 *ET-357845 TR 2SC242A F.G F05

TR553 *ET-357845 TR 2SC242A F.G F05

TR554 *ET-357845 TR 2SC242A F.G F05

TR555 *ET-357845 TR 2SC242A F.G F05

TR556 *ET-357845 TR 2SC242A F.G F05

TR557 *ET-357845 TR 2SC242A F.G F05

TR558 *ET-357845 TR 2SC242A F.G F05

TR559 *ET-357845 TR 2SC242A F.G F05

TR560 *ET-357845 TR 2SC242A F.G F05

TR561 *ET-357845 TR 2SC242A F.G F05

TR562 *ET-357845 TR 2SC242A F.G F05

TR563 *ET-357845 TR 2SC242A F.G F05

TR564 *ET-357845 TR 2SC242A F.G F05

TR565 *ET-357845 TR 2SC242A F.G F05

TR566 *ET-357845 TR 2SC242A F.G F05

TR567 *ET-357845 TR 2SC242A F.G F05

TR568 *ET-357845 TR 2SC242A F.G F05

TR569 *ET-357845 TR 2SC242A F.G F05

TR570 *ET-357845 TR 2SC242A F.G F05

TR571 *ET-357845 TR 2SC242A F.G F05

TR572 *ET-357845 TR 2SC242A F.G F05

TR573 *ET-357845 TR 2SC242A F.G F05

TR574 *ET-357845 TR 2SC242A F.G F05

TR575 *ET-357845 TR 2SC242A F.G F05

TR576 *ET-357845 TR 2SC242A F.G F05

TR577 *ET-357845 TR 2SC242A F.G F05

TR578 *ET-357845 TR 2SC242A F.G F05

TR579 *ET-357845 TR 2SC242A F.G F05

TR580 *ET-357845 TR 2SC242A F.G F05

TR581 *ET-357845 TR 2SC242A F.G F05

TR582 *ET-357845 TR 2SC242A F.G F05

TR583 *ET-357845 TR 2SC242A F.G F05

TR584 *ET-357845 TR 2SC242A F.G F05

TR585 *ET-357845 TR 2SC242A F.G F05

TR586 *ET-357845 TR 2SC242A F.G F05

TR587 *ET-357845 TR 2SC242A F.G F05

TR588 *ET-357845 TR 2SC242A F.G F05

TR589 *ET-357845 TR 2SC242A F.G F05

TR590 *ET-357845 TR 2SC242A F.G F05

TR591 *ET-357845 TR 2SC242A F.G F05

TR592 *ET-357845 TR 2SC242A F.G F05

TR593 *ET-357845 TR 2SC242A F.G F05

TR594 *ET-357845 TR 2SC242A F.G F05

TR595 *ET-357845 TR 2SC242A F.G F05

TR596 *ET-357845 TR 2SC242A F.G F05

TR597 *ET-357845 TR 2SC242A F.G F05

TR598 *ET-357845 TR 2SC242A F.G F05

TR599 *ET-357845 TR

10. SYSTEM CONTROL (2) P.C BOARD

Ref. No.	Part No.	Description
D201	ED-624903	D SILICON H 1S2473
D202	ED-824903	D SILICON H 1S2473
D203	ED-307572	D SILICON H 1SS131
D204	ED-624903	D SILICON H 1S2473
D205	ED-624903	D SILICON H 1S2473
IC201	EL-345765	IC LB1292
IC202	EL-345765	IC LB1292
IC203	EL-337013	IC LB1290
IC204	EL-356327	IC HA12067NT
IN201	EM-373136	IND FL FIP26A/W15Y
SW201	ES-373380	SW PUSH ESB-68630 4 THROW N 'NR SW'
TR201	ET-360824	TR DTC144EF
TR202	ET-360824	TR DTC144EF
TR203	ET-372030	TR DTA144EF
TR204	ET-372030	TR DTA144EF
TR205	ET-360824	TR DTC144EF
TR206	ET-360824	TR DTC144EF
TS201	ES-373381	SW TACT SKHPPP
TS202	ES-373381	SW TACT SKHPPP
TS203	ES-373381	SW TACT SKHPPP
TS204	ES-373381	SW TACT SKHPPP
TS205	ES-373381	SW TACT SKHPPP
TS206	ES-373381	SW TACT SKHPPP
TS207	ES-373381	SW TACT SKHPPP
TS208	ES-373381	SW TACT SKHPPP
TS209	ES-373381	SW TACT SKHPPP
TS210	ES-373381	SW TACT SKHPPP

11. TIMER SW P.C BOARD

Ref. No.	Part No.	Description
SW301	ES-370965	SW SLIDE SSSU02 1-01-03N [TIMER START SW]

12. REMOCON JACK P.C BOARD

Ref. No.	Part No.	Description
J401	EJ-346076	DIN J TCS4690-01-1111 P 88 [REMOTE]

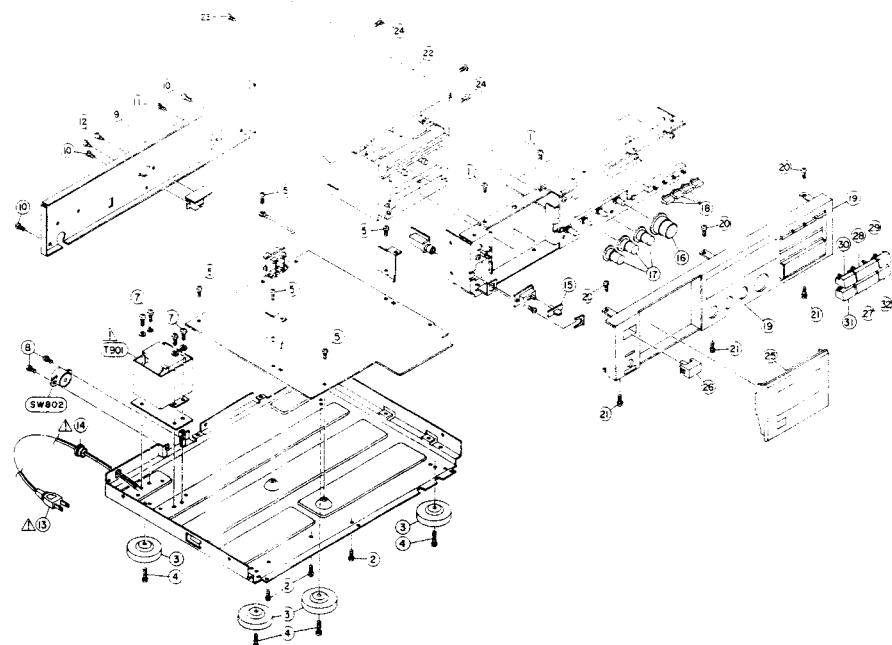
13. MOTOR P.C BOARD

Ref. No.	Part No.	Description
D5	ED-338561	D ZENER H H2ZFA B2 F10
IC1	61-201940	IC NJM4558S
IC2	61-201940	IC NJM4558S
IC3	61-337568	HOLE-E DHD-H070
IC4	61-337568	HOLE-E DHD-H070
TR1	ET-308977	TR ZSC2274K F F05
TR2	ET-337760	TR ZSA984K F
TR3	ET-308977	TR ZSC2274K F F05
TR4	ET-337760	TR ZSA984K F
VR1	EV-464253	R S-FIX V V8K1-1 0.10W 203
VR2	EV-464253	R S-FIX V V8K1-1 0.10W 203

14. FINAL ASSEMBLY BLOCK

Ref. No.	Part No.	Description
1	ZS-361242	ST BR2X065TLC CMT
2	ZS-345272	ST BR30X065TBL BNI
3	SA-B369350A1	FOOT PART
4	ZS-351098	ST BR30X12STL BNI
5	ZS-342001	ST BR30X065TBL NI3
6	MZ-553948	WIRE BAND F-100
T901A	*BT-373394	TRANS POWER T2100(U) [U]
T901B	*BT-373395	TRANS POWER T2100(A.C) [A.C]
T901C	*BT-373396	TRANS POWER T2100(E.V) [E.V]
T901D	*BT-373398	TRANS POWER T2100(B.S) [B.S]
7	ZS-322580	ST BD40X08STL BNI
SW802	*ES-359606	SW SELECTOR 8T-4150454 01-4 [U] [VOLTAGE SELECTOR]
8	ZS-352133	ST BR30X10STL CMT
9A	SP-373338A	PANEL REAR GX-52(U) [U]
9B	SP-373338C	PANEL REAR GX-52(C) [C]
9C	SP-373338D	PANEL REAR GX-52(E) [E]
9D	SP-373338E	PANEL REAR GX-52(B) [B]
10	ZS-345272	ST BR30X065TBL BNI
11	ZS-350934	PT BR30X08STL BNI
12	ZW-231030	RV MYL30X045 BL
13A	*EW-363854	AC CORD 200 0129AVFF B300 A U/ [U]
13B	*EW-363617	AC CORD200 0238 SPT1 B300 A UC [C]
13C	*EW-383667	AC CORD 200 0364 LCFL B300 A E [C]

FINAL ASSEMBLY BLOCK



Ref. No.	Part No.	Description	Ref. No.	Part No.	Description	
19-B	BD-T2100A0608	PANEL FRONT BLK GX-52-B [BLACK]	28-G	SK-373336D	KNOB OPERATION(A) PLAY-GOLD [GOLD]	
20	ZS-320906	ST BR30X06STL CMT	28-B	SK-373336C	KNOB OPERATION(A) PLAY-BLACK [BLACK]	
21	ZS-305827	ST BD30X06STL BNI	29-G	SK-373337B	KNOB OPERATION(B) FF-GOLD [GOLD]	
22-G	SP-373343B	COVER UPPER-GOLD [GOLD]	29-B	SK-373337A	KNOB OPERATION(B) FF-BLACK [BLACK]	
22-B	SP-373343A	COVER UPPER-BLACK [BLACK]	30-G	SK-373337D	KNOB OPERATION(B) REW-GOLD [GOLD]	
23-G	ZS-342001	ST BR30X06STL NI3 [GOLD]	30-B	SK-373337C	KNOB OPERATION(B) REW-BLACK [BLACK]	
23-B	ZS-345272	ST BR30X06STL BNI [BLACK]	31-G	SK-373337F	KNOB OPERATION(B) PAUSE-GOLD [GOLD]	
24-G	ZS-341959	ST BD40X06STL NI3 [GOLD]	31-B	SK-373337E	KNOB OPERATION(B) PAUSE-BLACK [BLACK]	
24-B	ZS-341960	ST BD40X06STL BNI [BLACK]	32-G	SK-373337H	KNOB OPERATION(B) MUTE-GOLD [GOLD]	
25-G	BD-T2100A070A	LD PANEL BLK GX-52-G [GOLD]	32-B	SK-373337G	KNOB OPERATION(B) MUTE-BLACK [BLACK]	
25-B	BD-T2100A070B	LD PANEL BLK GX-52-B [BLACK]	NOTE: SYMBOL FOR COLOR VALIDATION			
26-G	SK-373236A	KNOB POWER-GOLD [GOLD]	B: BLACK			
26-B	SK-373236B	KNOB POWER-BLACK [BLACK]	G: GOLD			
27-G	SK-373336B	KNOB OPERATION(A) STOP-GOLD [GOLD]				
27-B	SK-373336A	KNOB OPERATION(A) STOP-BLACK [BLACK]				

NOTE: SYMBOL FOR COLOR VALIDATION

B: BLACK
G: GOLD

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Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.
BA-T2100A040A	1A	ED-330622	D555	EL-337568	IC3	ET-308141	TR21
BA-T2100A040B	1B	ED-330622	D556	EL-337568	IC4	ET-308141	TR25
BA-T2100A050A	2	ED-330622	D562	EL-345765	38	ET-308141	TR26
BB-T2100A020A	1	ED-330622	D563	EL-345765	IC201	ET-308472	74
BB-T2100A020A	1	ED-330622	D564	EL-345765	IC202	ET-308472	TR407
BD-T2100A060A	19-G	ED-330622	D565	EL-346071	43	ET-308472	TR555
BD-T2100A060B	19-B	ED-330622	D566	EL-346071	IC301	ET-308472	TR30
BD-T2100A070A	25-G	ED-338332	D7	EL-346071	IC3	ET-308977	78
BD-T2100A070B	25-B	ED-338561	16	EL-346071	IC4	ET-308977	TR405
BF-B336013	14	ED-338561	D5	EL-347875	44	ET-308977	TR406
BH-T2100A030A	2	ED-344244	D901	EL-348785	IC101	ET-308977	TR1
BH-T2100A030A	32	ED-346538	23	EL-353227	42	ET-308977	TR3
BL-B336007	4	ED-346538	D519	EL-353227	IC701	ET-337760	77
BL-B336009	10	ED-346538	D520	EL-355602	39	ET-337780	TR2
BL-B336150	21	ED-346540	24	EL-355602	IC5	ET-337760	TR4
BL-B336155	29	ED-346540	D507	EL-356327	36	ET-345091	62
BL-T2030A160A	17	ED-346540	D510	EL-356327	IC204	ET-345091	PH1(R)
BL-T2030A170A	18	ED-346550	15	EL-357498	41	ET-345091	PH1(L)
BM-B336989	M902	ED-346550	D516	EL-357498	IC601	ET-347961	83
BM-B345196	4	ED-346550	D518	EL-359985	35	ET-347961	TR15
BM-B345196	M903	ED-346582	D6	EL-359985	IC201	ET-347961	TR16
BM-M3103A010A	3	ED-346604	21	EL-372031	48	ET-347961	TR17
BM-M3103A010A	M901	ED-346604	D11	EL-372031	X1	ET-347961	TR18
BR-T2069A360A	5	ED-346609	22	EL-373379	40	ET-347961	TR19
BR-T2069A360A	12	ED-346609	D9	EL-373379	IC1	ET-349081	B2
BT-373394	9	ED-346824	18	EL-373383	47	ET-349081	TR101
BT-373394	T901A	ED-346824	D560	EL-373383	IC401	ET-349081	TR102
BT-373395	6	ED-373390	D506	EL-336905	J601	ET-349081	TR103
BT-373395	T901B	ED-373390	D509	EL-346076	J401	ET-349081	TR201
BT-373396	8	ED-624903	11	EL-369995	J701	ET-349081	TR202
BT-373396	T901C	ED-624903	D101	EM-373136	49	ET-349081	TR203
BT-373398	7	ED-624903	D505	EM-373136	IN201	ET-349081	TR301
BT-373398	T901D	ED-624903	D508	EO-323982	FL202	ET-349081	TR302
BZ-T2030A110C	3	ED-624903	D515	EO-357050	L301	ET-349081	TR303
EA-336012	13	ED-624903	D517	EO-368465	FL801	ET-349081	TR304
EC-320548	C801A	ED-624903	D559	EO-369999	L302	ET-349081	TR305
EC-338411	C801B	ED-624903	D601	EO-372996	L201	ET-349081	TR306
ED-306010	19	ED-624903	D602	EO-373384	T401	ET-349081	TR307
ED-306010	D557	ED-624903	D201	EO-373483	T402	ET-349081	TR501
ED-307572	10	ED-624903	D202	EO-328529	50	ET-349081	TR504
ED-307572	D1	ED-624903	D204	EO-328529	RL101	ET-349081	TR505
ED-307572	D2	ED-624903	D205	ER-200926	F52	ET-349081	TR506
ED-307572	D3	ED-306949	28	ER-200926	FR501	ET-349081	TR507
ED-307572	D4	ED-306949	F3A	ER-200972	53	ET-352726	76
ED-307572	D5	ED-306949	F4A	ER-200972	FR401	ET-352726	TR502
ED-307572	D10	ED-309388	30	ER-358910	54	ET-352726	TR503
ED-307572	D12	ED-309388	F1A	ER-358910	IC705	ET-352726	TR508
ED-307572	D13	ED-309388	F2A	ER-358910	IC706	ET-352726	TR509
ED-307572	D14	ED-309391	32	ER-367642	51	ET-352726	TR510
ED-307572	D15	ED-309391	F1B	ER-367642	FR502	ET-353897	66
ED-307572	D16	EF-309391	F2B	ES-336990	55	ET-353897	TR3
ED-307572	D17	EF-309392	31	ES-336990	SW902	ET-353897	TR4
ED-307572	D18	EF-309392	F3B	ES-336990	SW903	ET-353897	TR5
ED-307572	D203	EF-309392	F4B	ES-336990	SW904	ET-353897	TR6
ED-309069	20	EF-355374	25	ES-359606	59	ET-353897	TR7
ED-309069	D558	EF-355374	F1D	ES-359606	SW802	ET-353897	TR8
ED-316389	13	EF-355374	F2D	ES-370965	60	ET-353897	TR9
ED-316389	D8	EF-358974	26	ES-370965	SW301	ET-353897	TR10
ED-324013	17	EF-358974	F3D	ES-371104	58	ET-353897	TR11
ED-324013	D561	EF-358974	F4D	ES-371104	SW801	ET-353897	TR12
ED-324014	14	EF-593706	27	ES-372912	56	ET-353897	TR13
ED-324014	D523	EF-593706	F1C	ES-372912	SW905	ET-353897	TR22
ED-324014	D552	EF-593706	F2C	ES-372980	57	ET-353897	TR23
ED-324014	D553	EF-601942	28	ES-373380	SW201	ET-353897	TR24
ED-330622	12	EF-601942	F3C	ES-373381	61	ET-353897	TR29
ED-330622	D501	EF-601942	F4C	ES-373381	TS201	ET-353897	TR32
ED-330622	D502	EH-368105	FL101	ES-373381	TS202	ET-353897	TR33
ED-330622	D503	EH-368105	FL203	ES-373381	TS203	ET-353897	TR34
ED-330622	D504	EH-368105	FL204	ES-373381	TS204	ET-353897	TR35
ED-330622	D511	EH-368105	FL205	ES-373381	TS205	ET-353897	TR36
ED-330622	D512	EH-372101	33	ES-373381	TS206	ET-353897	TR37
ED-330622	D513	EH-372101	FL201	ES-373381	TS207	ET-354083	84
ED-330622	D514	EI-201940	45	ES-373381	TS208	ET-354083	TR553
ED-330622	D521	EI-201940	IC1	ES-373381	TS209	ET-354365	67
ED-330622	D522	EI-201940	IC2	ES-373381	TS210	ET-354365	TR105
ED-330622	D541	EI-336992	46	ET-308141	79	ET-354365	TR106
ED-330622	D542	EI-336992	IC2	ET-308141	TR513	ET-354414	72
ED-330622	D543	EI-337013	37	ET-308141	TR554	ET-354414	TR1
ED-330622	D544	EI-337013	IC203	ET-308141	TR556	ET-354414	TR2
ED-330622	D554	EI-337568	34	ET-308141	TR14	ET-354414	TR27

Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.
ET-354414	TR28	SK-373236B	26-B	ZW-270088	30		
ET-354415	65	SK-373334A	16-B	ZW-305546	23		
ET-354415	TR411	SK-373334B	16-G	ZW-306464	47		
ET-354415	TR601	SK-373335A	17-B	ZW-329422	48		
ET-354415	TR602	SK-373335B	17-G	ZW-330073	15		
ET-354415	TR603	SK-373336A	27-B	ZW-336604	7		
ET-354415	TR20	SK-373336B	27-G	ZW-356657	24		
ET-354841	75	SK-373336C	28-B	ZW-373137	37		
ET-354841	TR552	SK-373336D	28-G	ZW-653163	5		
ET-357845	81	SK-373337A	29-B				
ET-357845	TR401	SK-373337B	29-G				
ET-357845	TR511	SK-373337C	30-B				
ET-357845	TR551	SK-373337D	30-G				
ET-360824	71	SK-373337E	31-B				
ET-360824	TR201	SK-373337F	31-G				
ET-360824	TR202	SK-373337G	32-B				
ET-360824	TR205	SK-373337H	32-G				
ET-360824	TR206	SK-373340A	18-B				
ET-365394	80	SK-373340B	18-G				
ET-365394	TR557	SP-336182B-A	49				
ET-370310	73	SP-336163B	52				
ET-370310	TR403	SP-373338A	9A				
ET-370310	TR404	SP-373338B	9B				
ET-370310	TR409	SP-373338D	9C				
ET-370310	TR410	SP-373338E	9D				
ET-372030	64	SP-373343A	22-B				
ET-372030	TR203	SP-373343B	22-G				
ET-372030	TR204	SZ-336166	54				
ET-373382	63	TC-336002	8				
ET-373382	TR31	TC-336004B	1				
EV-345781	VR401	ZG-336141	13				
EV-365577	VR102	ZG-336157	41				
EV-356582	VR101	ZG-336160	45				
EV-357619	VR201	ZG-336615	53				
EV-373485	68	TC-336605	91				
EV-373485	VR104	TC-336605	9				
EV-357619	VR301	ZG-341964	19				
EV-357619	VR301	ZG-341970	4				
EV-353895	88	ZG-341972	39				
EV-373385	VR702	ZG-342575	27				
EV-373387	86	ZG-373323	33				
EV-373387	VR701	ZS-201275	6				
EV-373388	87	ZS-201275	51				
EV-373388	VR703	ZS-201508	34				
EV-373389	85	ZS-305827	21				
EV-373389	VR704	ZS-308931	42				
EV-464253	VR1	ZS-320906	20				
EV-464253	VR2	ZS-322580	7				
EV-363617	13B	ZS-336614	8				
EV-363654	13A	ZS-341959	24-G				
EV-363667	13C	ZS-341960	24-B				
EV-363679	13D	ZS-342001	5				
ZE-330775	14	ZS-342001	23-G				
HR							

Abbreviation	Explanation	Abbreviation	Explanation
AC	Alternating Current	MIN	MINute
A/D	Analog/Digital	MML	Maximum Modulation Level
AF	Auto Fader	MOL	Maximum Output Level
AMP	AMPlifier	MPX	Multi PleX
AR	Anti Recording	NC	Not Connected (No Connection)
AT BIAS	Auto Tuning BIAS	NFB	Negative Feed Back
ATT	ATTenuator	NORM	NORMal
BAL	BALance	NR	Noise Reduction
BEF	Band Elimination Filter	OSC	OSCillator (OSCillation)
BSS	Blank Search System	P	Pulse
CAP M	CAPsTan Motor	PB	Play Back
CH	CHANNEL	QMSS	Quick Memory Search System
COMP	COMParator	QR	Quick Reverse
CONT	CONTinuance	R CH	Right CHannel
CRLP	Computer Recording Level Processing	REC	REcord (RECORDing)
CS	Chip Select	REV	REVerse
D/A	Digital/Analog	ROT	ROTation
DC	Direct Current	REW	REWind
DET	DETector	SEC	SECond
DISCRI	DISCRIminator	SELE	SELector
DUB	DUBbing	SENS	SENSitivity
EQ	EQUALizer	SEPP	Single Ended Push Pull
FF(or F.FWD)	Fast Forward	SIG	SIGNAL
FLD	FLuorescent Display	SPECT	SPECTrum
FREQ	FREQuency	STD	STanDard
FWD	ForWarD	SW	SWitch
GND	GrouND	SYSCON	SYStem CONtrol
H	High	TP	Test Point
HPF	High Pass Filter	TRIG	TRIGa
IND	INDicator	VCA	Voltage Control Attenuator
IPLS	INSTANT Program Location System	VOL	VOLume
L	Low	VOLT	VOLTage
L CH	Left CHannel	VR	Variable Resistor
LED	Light Emitining Diode	X'TAL	cYSTAL
MEMO	MEMOry	X1	Normal speed
MICOM	MicroCOMputer	X2	Dubble speed

AKAI

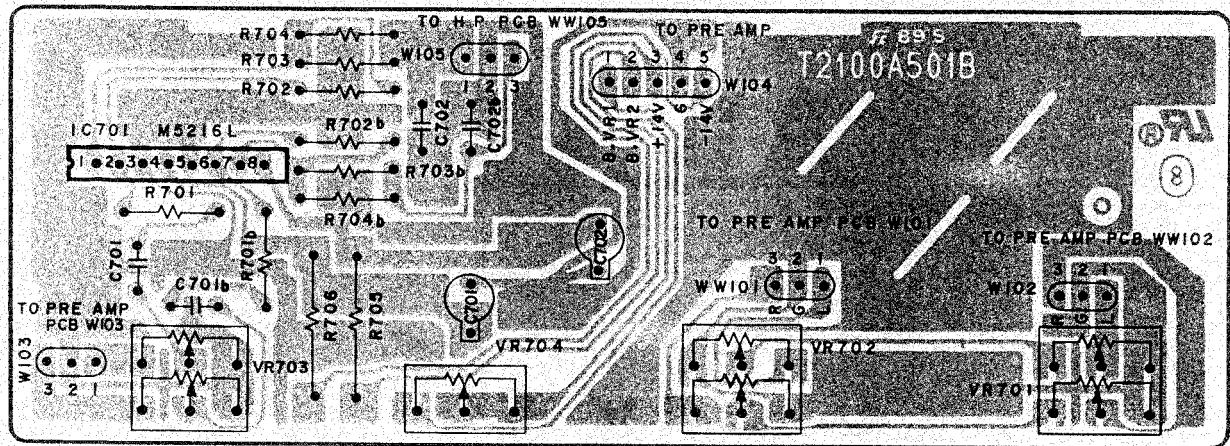
MODEL GX-52

SCHEMATIC DIAGRAM AND PC BOARDS

TABLE OF CONTENTS

1. OTHER PC BOARDS.....	2
2. CONNECTION DIAGRAM.....	3
3. SYSTEM CONTROL SCHEMATIC DIAGRAM.....	4
4. SYSTEM CONTROL (1) PC BOARD, SYSTEM CONTROL (2) PC BOARD, AND MOTOR PC BOARD...	5
5. PRE AMP SCHEMATIC DIAGRAM.....	6
6. PRE AMP PC BOARD.....	7
7. BLOCK DIAGRAM.....	8

HEAD PHONE AMP PCB T2100A501B

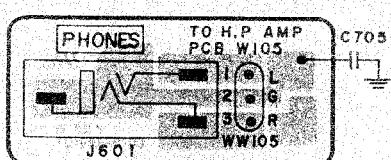


PHONES
LEVEL

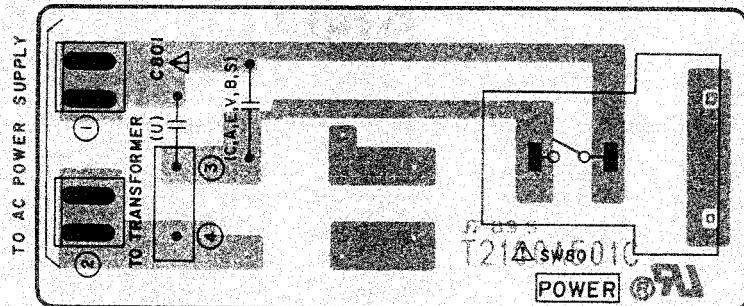
BIAS
ADJUST

REC
BALANCE

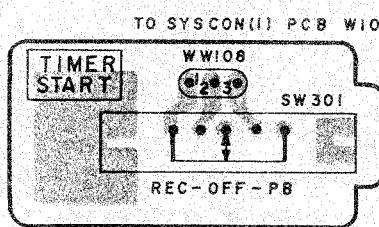
REC
LEVEL



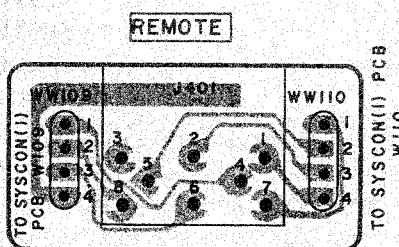
HEAD PHONE PCB
T2100A501D



POWER TRANS PCB T2100A501C



TIMER SW PCB
T2100A502C

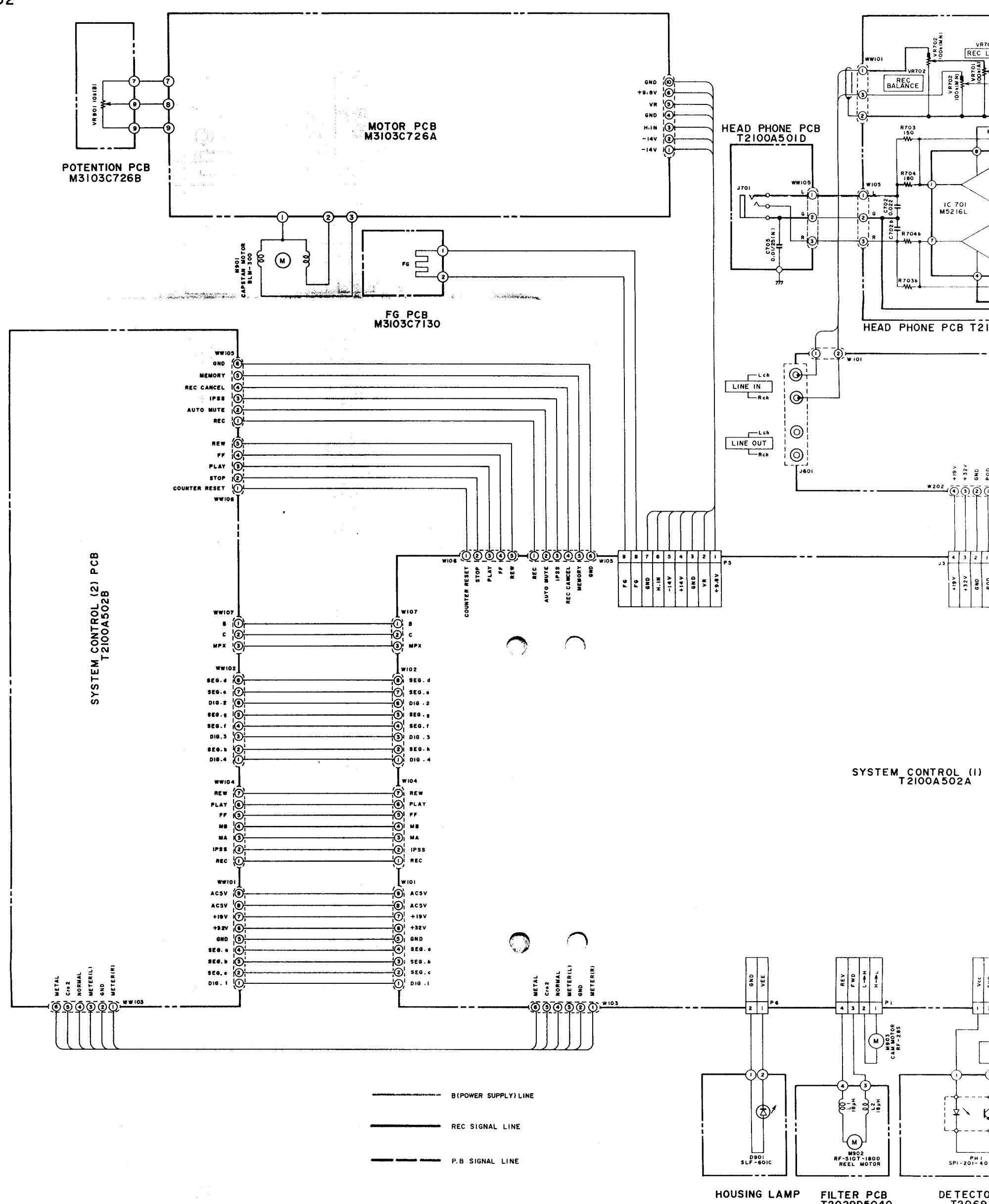


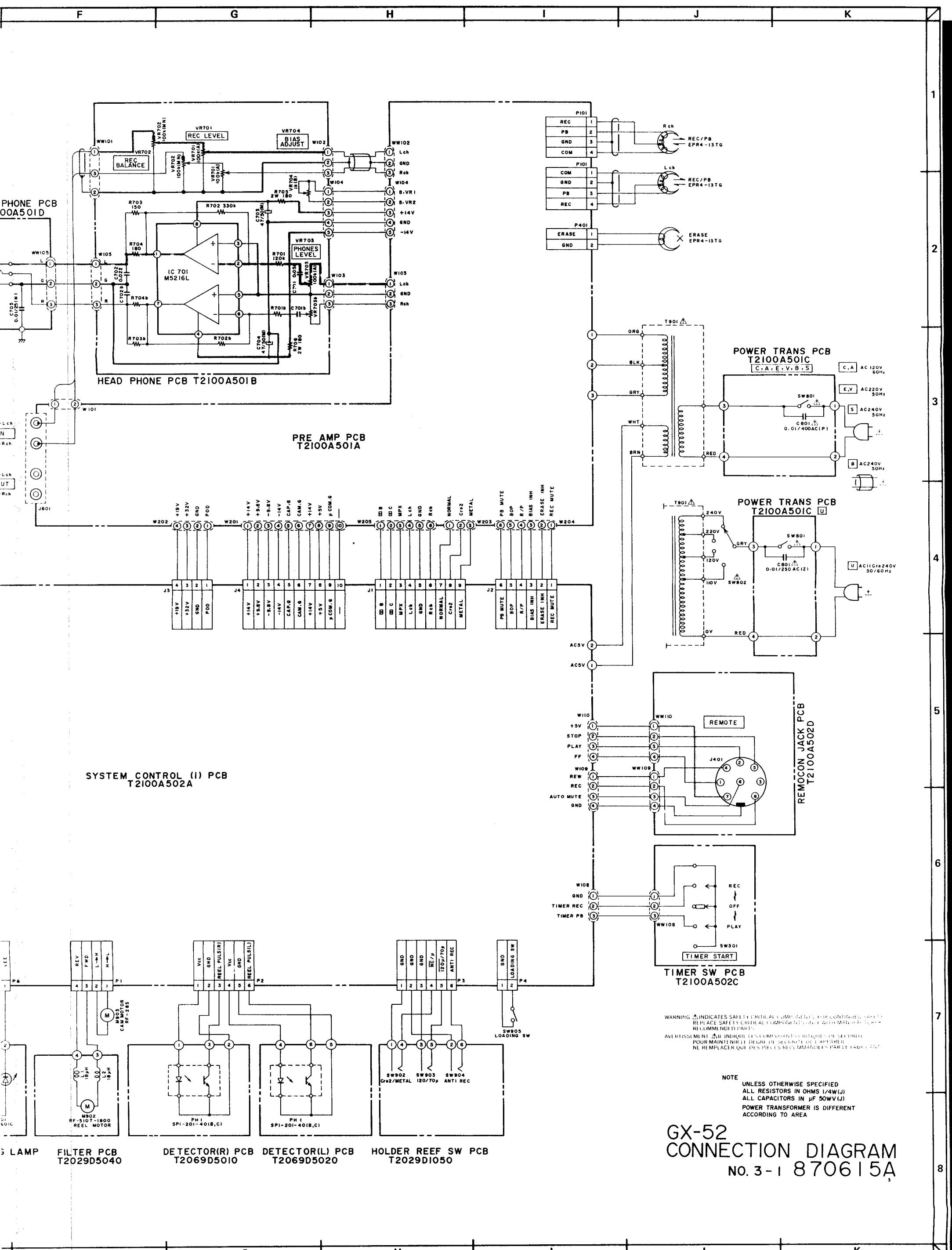
REMOCON JACK PCB
T2100A502D

WARNING: INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY.
REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S
RECOMMENDED PARTS

AVERTISSEMENT: INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ.
POUR MAINTENIR LE DÉGRÉ DE SÉCURITÉ DE L'APPAREIL,
NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT

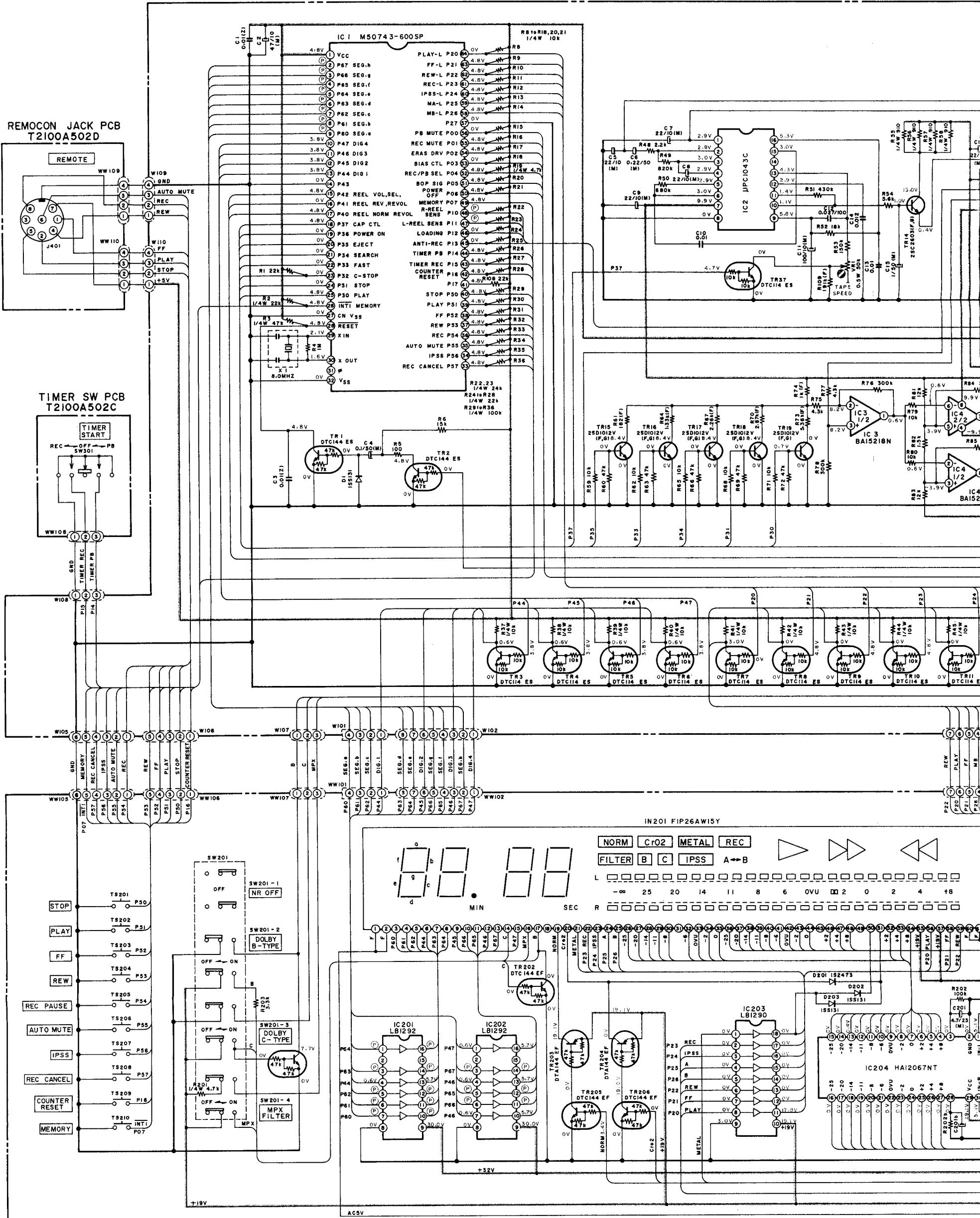
GX-52

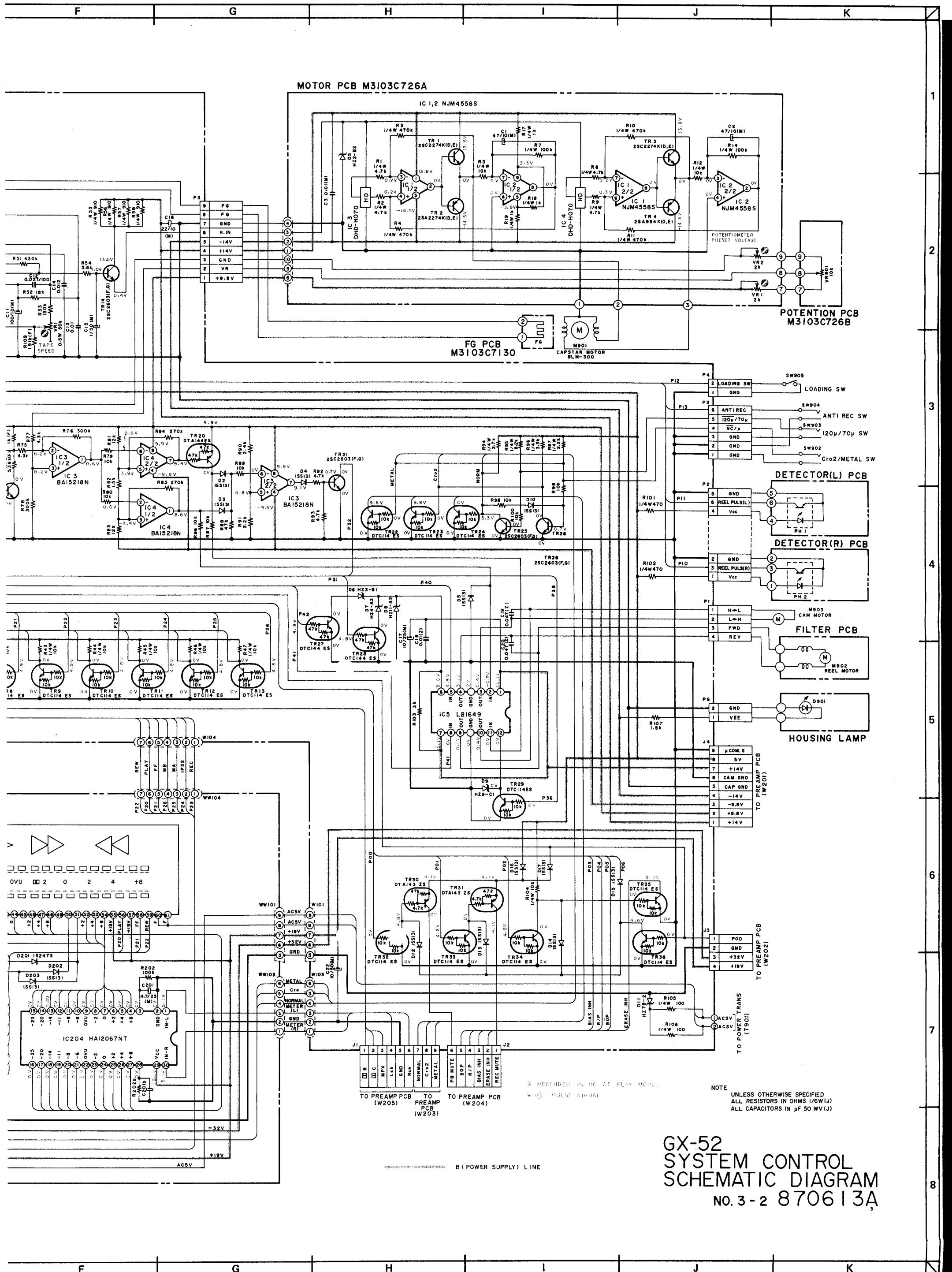


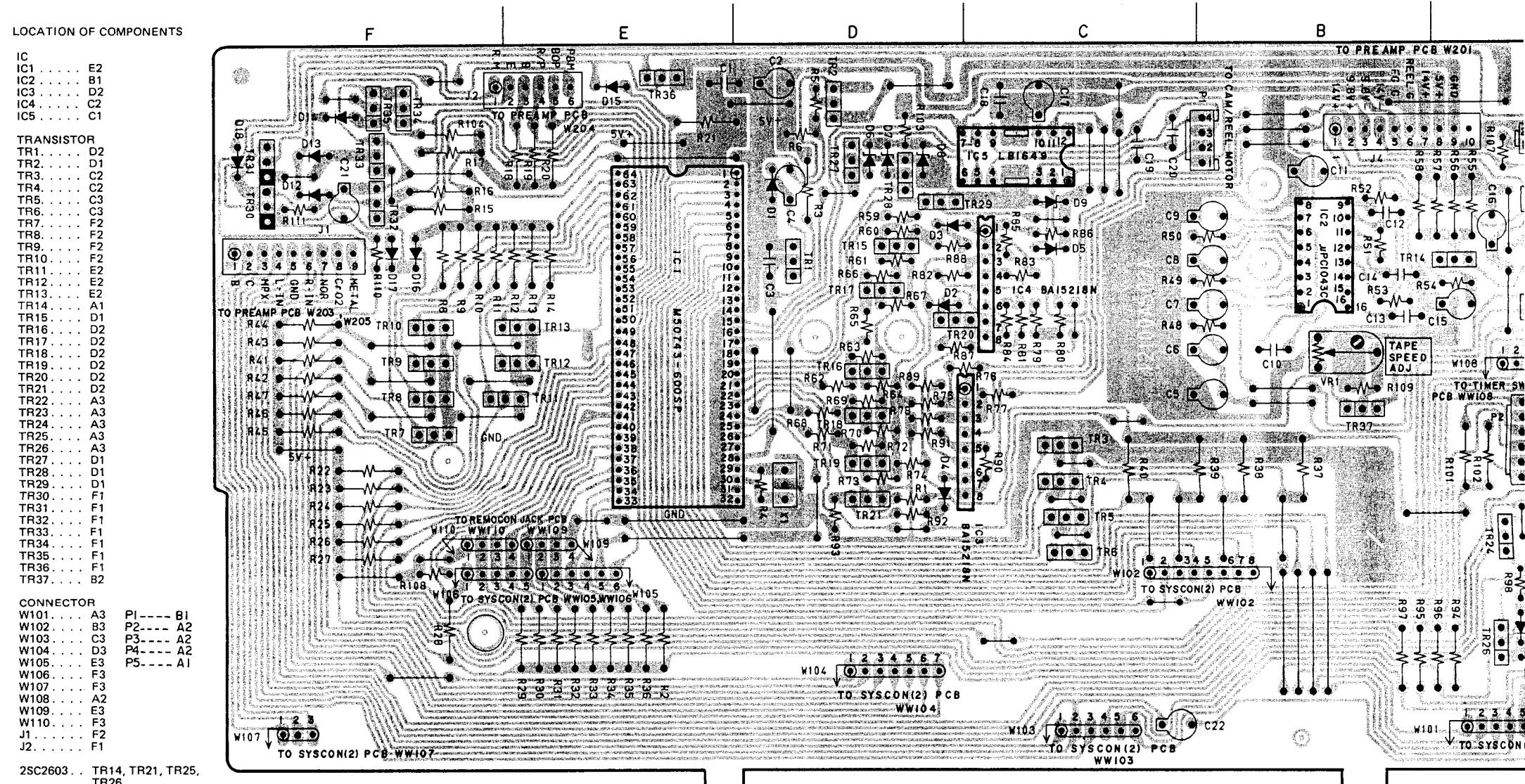


GX-52

SYSTEM CONTROL (1) PCB T2100A502A

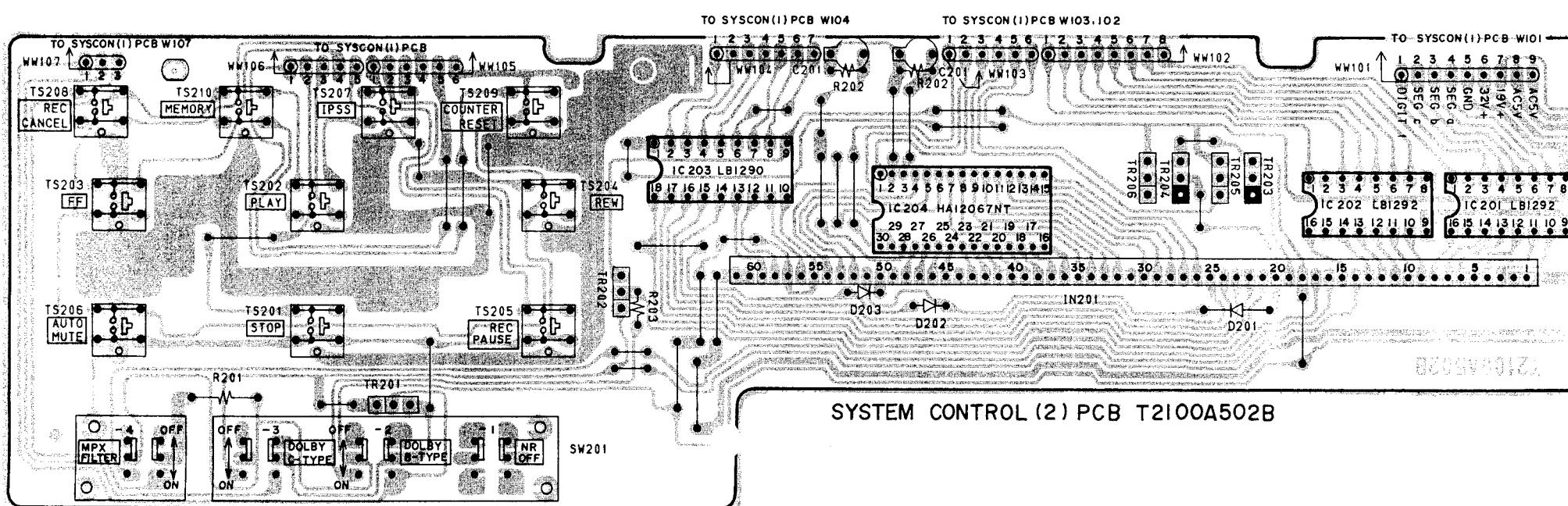






2SC2603 . .	TR14, TR21, TR25, TR26
2SD1012 . .	TR15, TR16, TR17, TR18, TR19
DTC144 . .	TR1, TR2, TR20, TR27, TR28
DTC114 . .	TR3, TR4, TR5, TR6, TR7, TR8, TR9, TR10, TR11, TR12, TR13, TR22, TR23, TR24, TR29, TR32, TR33, TR34, TR35, TR36, TR37
DTA143 . .	TR30, TR31

2SC2603
2SD1012
DTC144
DTC114
DTA143



LOCATION OF COMPONENTS

ICs
IC201....A1
IC202....A1
IC203....D1

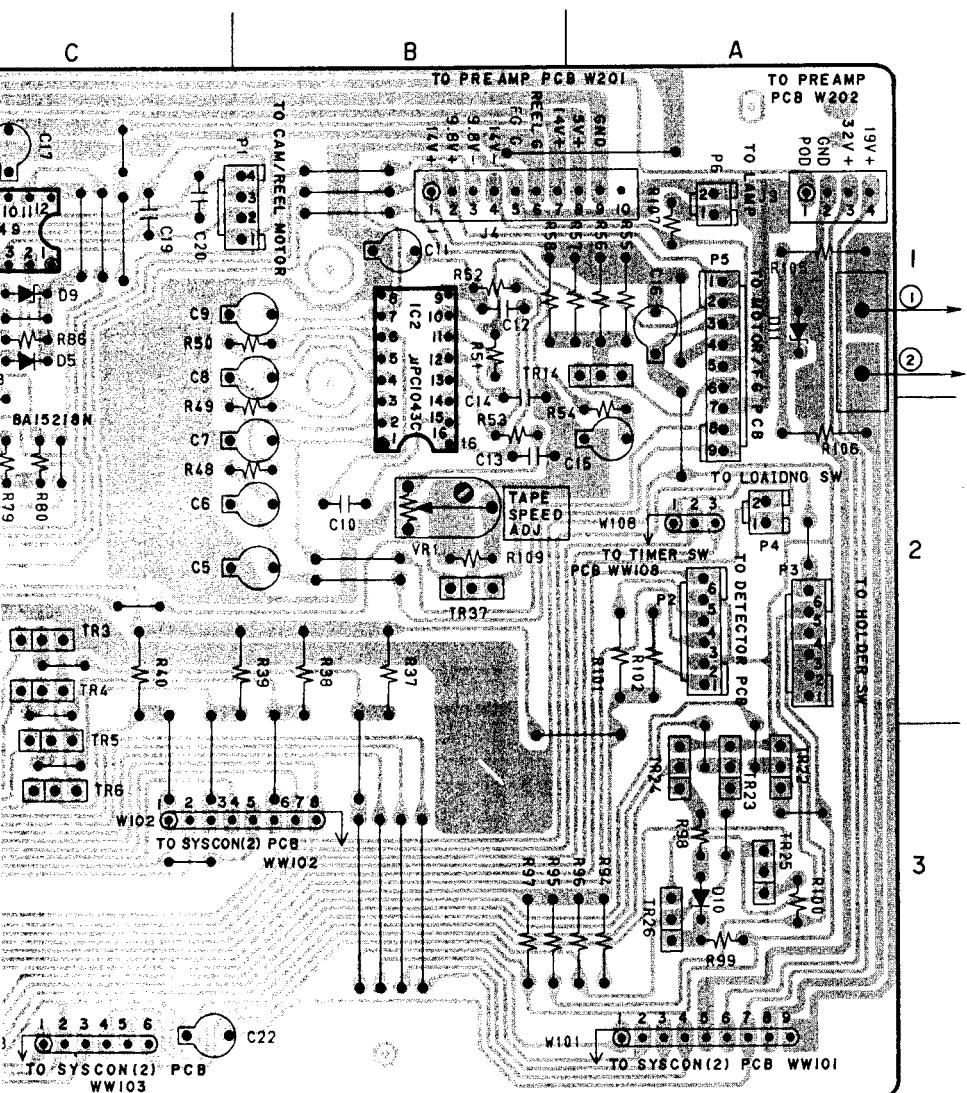
DTC144....TR201,TR202,TR205
TR206

TR206
DTA144...TR203,TR204

TRANSISTORS
TR201....E2
TR202....D2
TR203....B1
TR204....B1
TR205....B1
TR206....B1
CONNECTORS
WW101....A1
WW102....B1

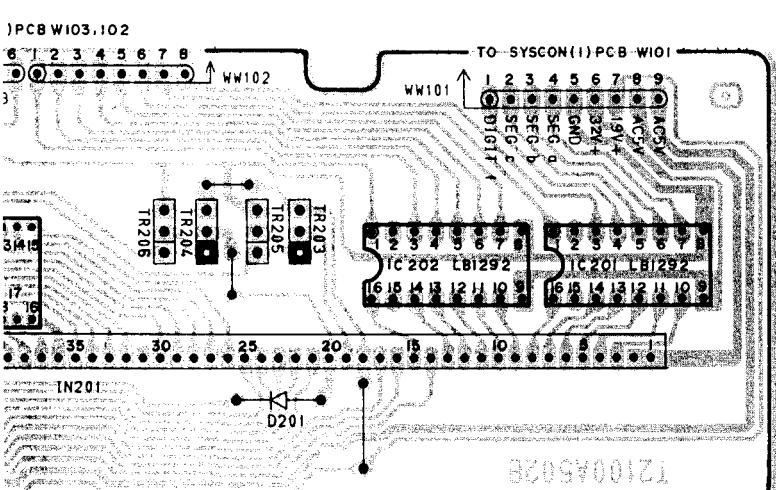
 B C E = NPN TRANSISTOR
 B C E = PNP TRANSISTOR

DTC144
DTA144



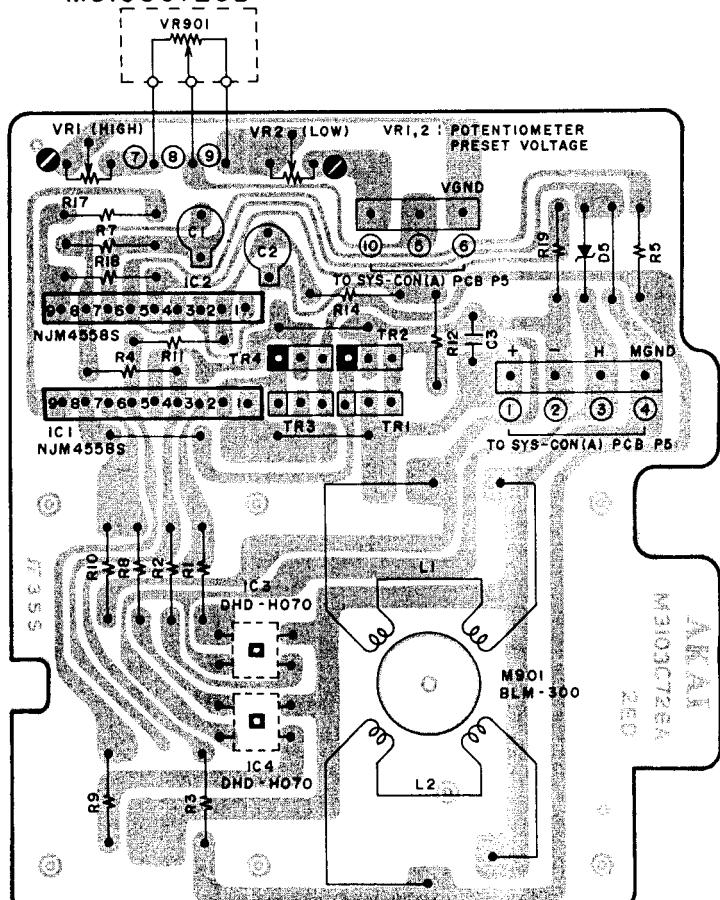
B T2100A502A

B = NPN TRANSISTOR
 B = PNP TRANSISTOR
 2SC2603
 2SD1012
 DTC144
 DTC114
 DTA143



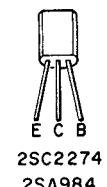
(2) PCB T2100A502B

POTENTION PCB
M3103C726B



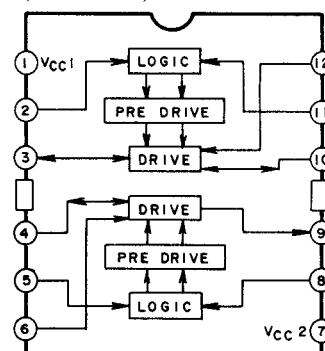
MOTOR PCB M3103C726A

B = PNP TRANSISTOR
 B = NPN TRANSISTOR
 TRI,3 --- 2SC2274
 TR2,4 --- 2SA984

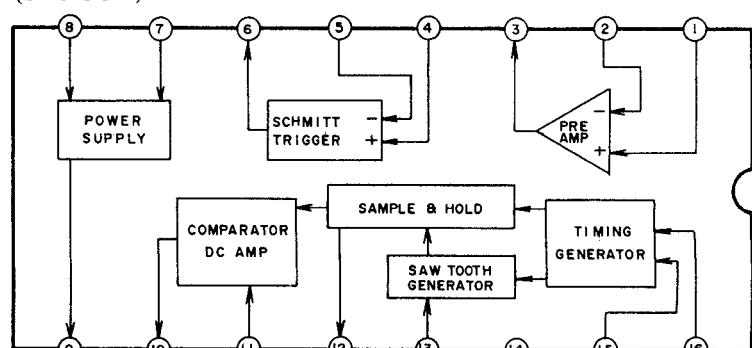


2SC2274
2SA984

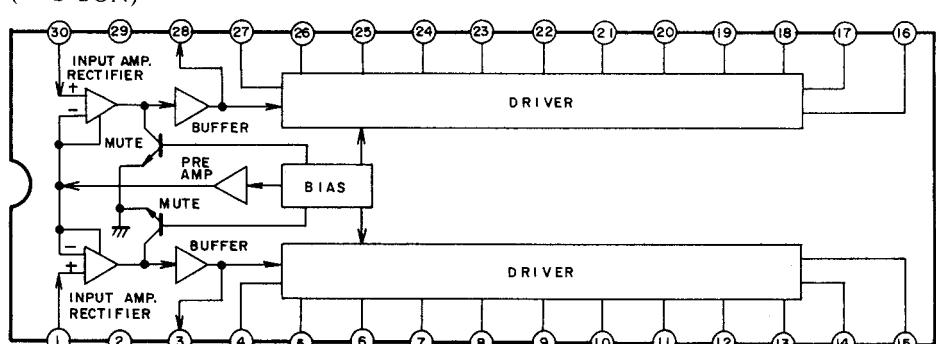
LB1649
(SYS-CON)



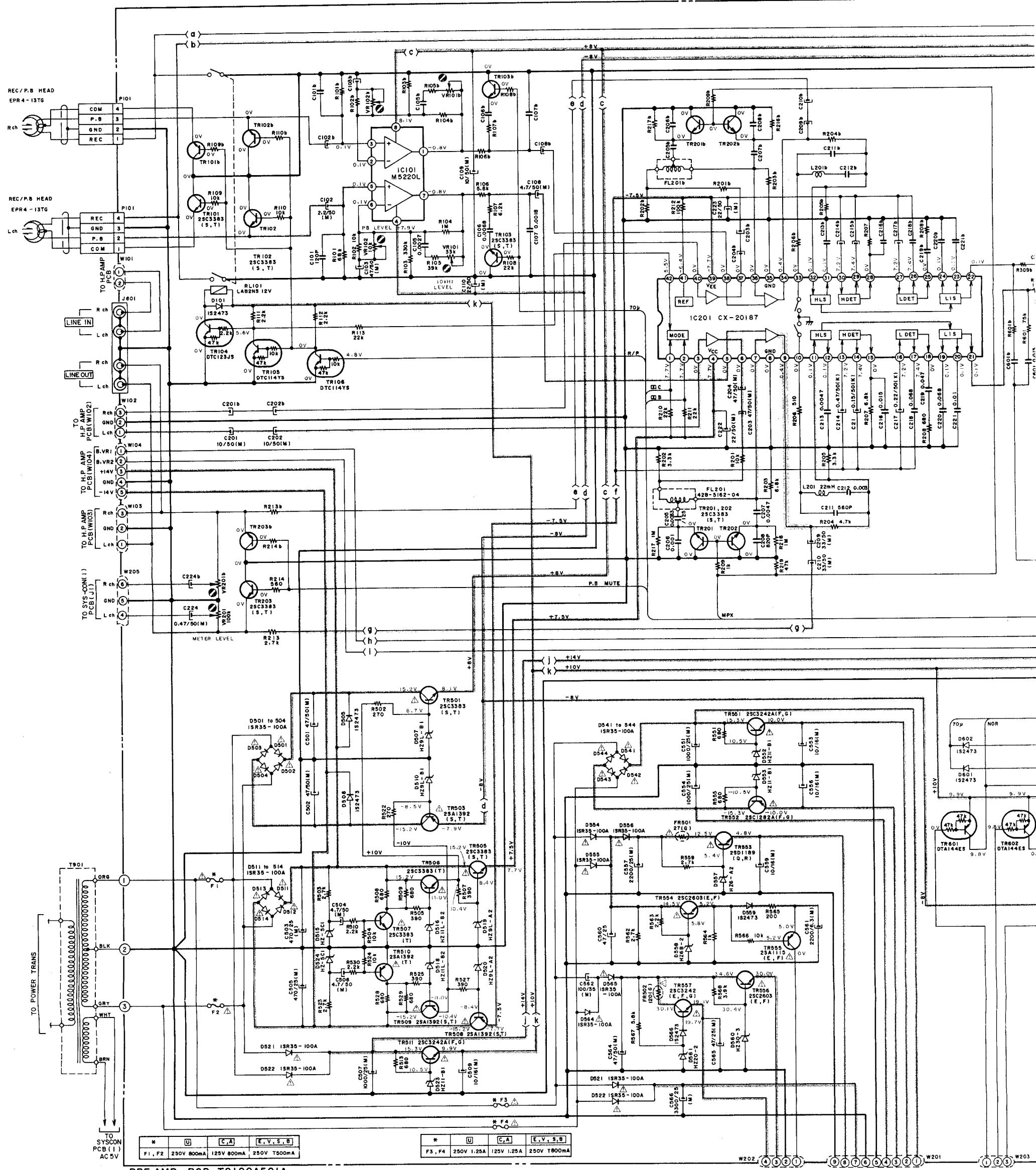
μ PC1043C
(SYS-CON)



HA12067NT
(SYS-CON)



GX-52



FI, F2 250V 800mA 125V 800mA 250V 1500mA

TO SYSCON PCB (1) AC 5V	[]	[]	[]	[]
	F1, F2	250V 800mA	125V 800mA	250V T500mA

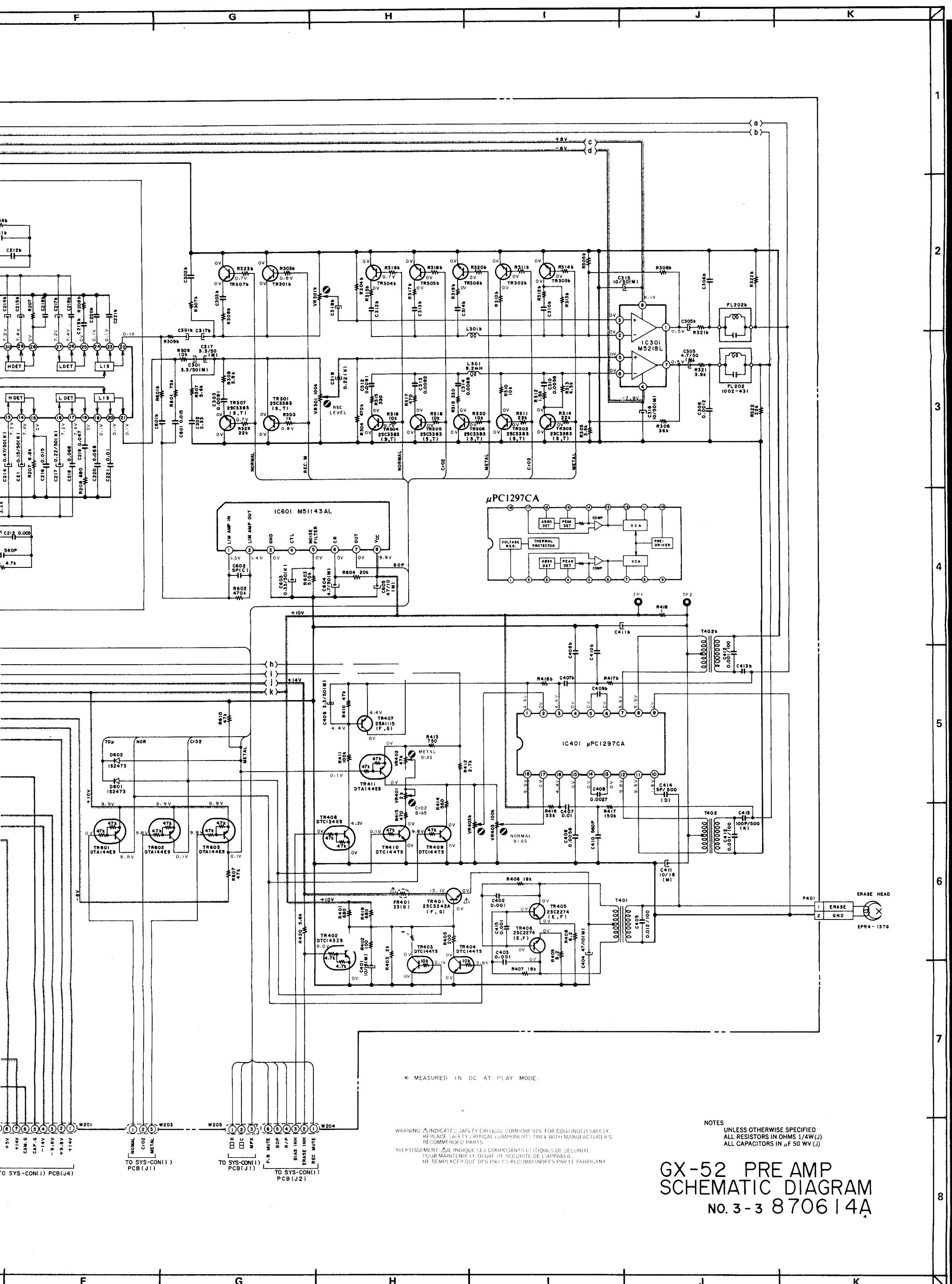
*	U	C,A	E,V,S,B
F3 , F4	250V 1.25A	125V 1.25A	250V T800mA

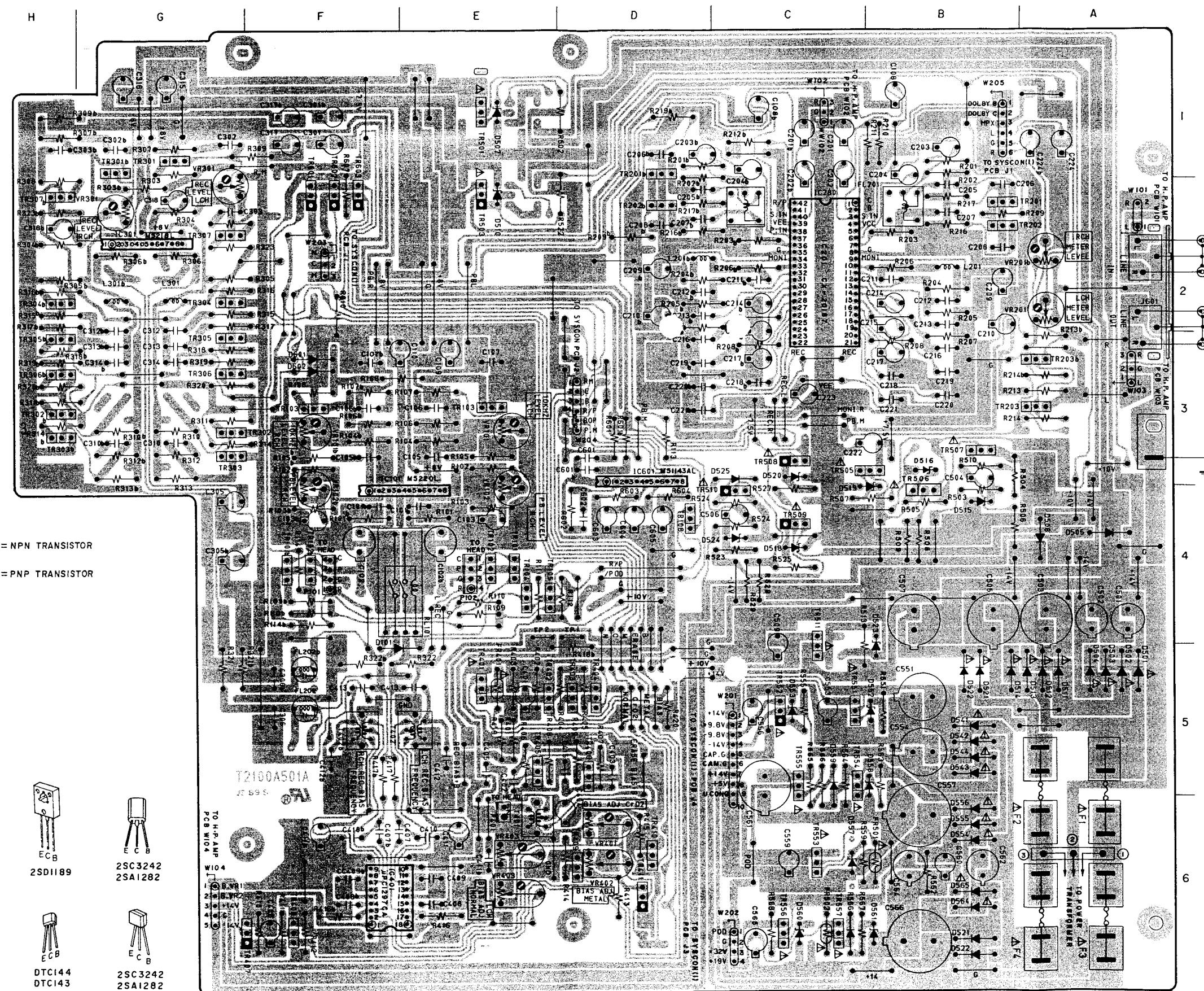
+19V
+32V
GND
POD

TO SYS-CON(1)
PCB(J3) TO SYS-CON(1) PCB(J4)

NOMAL
CRO2
METAL

TO SYS-CON(1)
PCB(J1)





PRE AMP PCB T2100A501A

WARNING: Δ INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY.
REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S
RECOMMENDED PARTS

AVERTISSEMENT: Δ INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ.
POUR MAINTENIR LE DÉGRÉ DE SÉCURITÉ DE L'APPAREIL,
NE REMPLACER QUÉ DES PIÈCES RECOMMANDÉES PAR LE FABRICANT

LOCATION OF COMPONENTS

IC
IC101 . . . E4
IC201 . . . E4
IC301 . . . G2
IC401 . . . E6
IC601 . . . D3

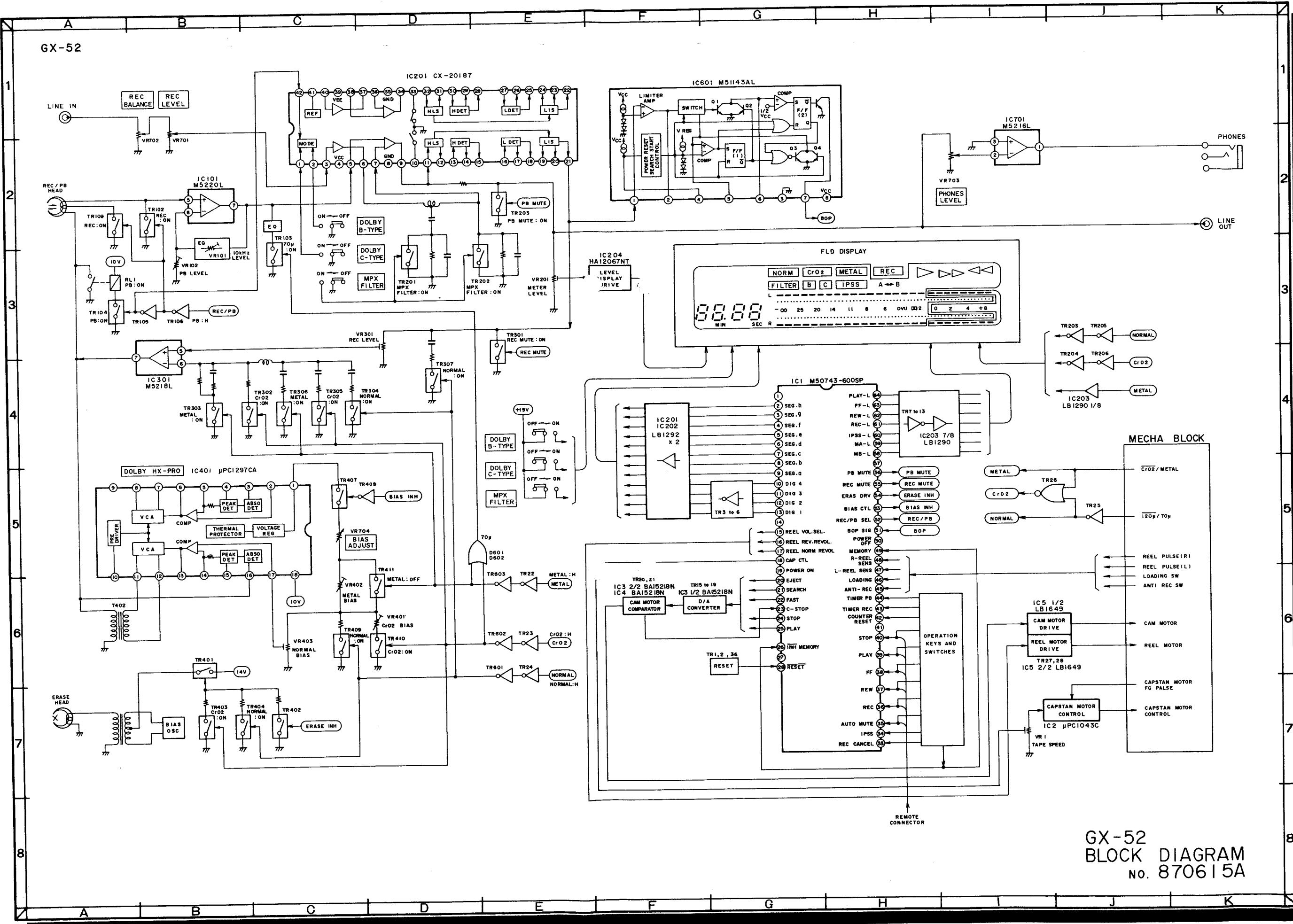
TRANSISTOR

TR101 . . . E4
TR102 . . . E4
TR103 . . . F4
TR104 . . . E3
TR105 . . . E4
TR106 . . . D4
TR201 . . . B2
TR202 . . . D1
TR203 . . . D2
TR204 . . . A3
TR205 . . . G1
TR301 . . . G1
TR302 . . . G3
TR302 . . . H3
TR303 . . . G3
TR303 . . . H3
TR304 . . . G2
TR304 . . . H2
TR305 . . . G3
TR306 . . . G3
TR306 . . . H3
TR307 . . . G2
TR307 . . . H2
TR401 . . . E5
TR402 . . . E6
TR403 . . . D5
TR404 . . . D5
TR405 . . . D5
TR406 . . . D5
TR407 . . . G6
TR408 . . . F6
TR409 . . . D6
TR410 . . . D6
TR411 . . . D6
TR501 . . . E1
TR502 . . . E1
TR503 . . . E2
TR504 . . . E2
TR505 . . . B3
TR506 . . . B3
TR507 . . . B3
TR508 . . . C4
TR509 . . . C4
TR510 . . . C4
TR511 . . . C5
TR512 . . . C5
TR513 . . . C6
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CONNECTOR

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W102 . . . C1
W103 . . . A3
W104 . . . G6
W201 . . . C5
W202 . . . C6
W203 . . . F2
W204 . . . D3
W205 . . . B1
P101 . . . F4
P102 . . . E4
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